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**Andean Rural Health Care (ARHC)
and
Consejo de Salud Rural Andino (CSRA)**

Mid-Term Evaluation Report
Child Survival XIII Project
Cooperative Agreement No. FAO-A-00-97-00027-00
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Contact Persons:

ARHC - USA
Sara Lewis Espada
P.O. Box 216
Lake Junaluska, NC 28745
828-452-3544
sarale@haywood.main.nc.us

CSRA - Bolivia
Dr. Maria Elena Ferrel
Casilla #13387
La Paz, Bolivia
011-591-2-41-2495
csra@caoba.entelnet.bo



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Throughout this evaluation, staff at all levels, from the headquarters backstop to the volunteer health promoters, were untiring in their efforts to share and analyze data and to communicate with each other and with partners to better realize their purpose of reducing death and illness in the Bolivian altiplano. Information on weaknesses as well as strengths was shared without recrimination in a spirit of working together to find solutions. All persons attending the evaluation workshops had a voice and had an opportunity to participate and know that he or she was heard.

The final document was a group effort. It was developed from information recorded on interview guides, flipcharts, workshop notes, and in project documents. Several members of the evaluation team prepared information and charts specifically for this document and its appendices. I facilitated the process and put everything together. My draft evaluation document was reviewed by several members of the team before being finalized.

I would like to particularly acknowledge the contributions of the following persons to the evaluation: Sara Lewis Espada, Technical Manager (ARHC); Maria Elena Ferrel, Technical Manager; Jose Ibanez, Statistician; Gloria M. Laime, Director of Finance and Administration; Nelly Marca Rivera, Technical Advisor; and Nathan Robison, Executive Director.

The design of this project is unique among those with which the Team Leader has worked in the past. No other project has worked so closely with the Ministry of Health (MOH) that the lines blur between government and CSRA staff: all are members of the same network of health care service providers. The work that ARHC/CSRA is planning for the next two years to strengthen this network and the financial sustainability of the project should prove interesting and challenging for all concerned.

It was been a pleasure to have been a part of this project team albeit for a very brief time.

La Rue K. Seims, M.P.H.; M.A.,
Team Leader
Seims@LiveService.com

Acronyms

| | | |
|--------|---|---|
| ARHC | - | Andean Rural Health Care |
| ARI | - | Acute respiratory infection |
| BCG | - | Bacilli Calmette-Guerin |
| BHR | - | Bureau for Humanitarian Relief |
| Bs | - | Boliviano (unit of currency) |
| CAR | - | Contraceptive acceptance rate |
| CHW | - | Community health worker |
| CSRA | - | Consejo de Salud Rural Andino |
| DIP | - | Detailed Implementation Plan |
| DPT | - | Diphtheria, pertussis, tetanus |
| DPT1 | - | Diphtheria, pertussis, tetanus vaccine, first dose |
| DPT3 | - | Diphtheria, pertussis, tetanus vaccine, third dose |
| HAM | - | Honorable Alcaldia Municipal (Mayor's Office or Municipal Office) |
| HQ | - | Headquarters |
| HV | - | Health volunteer |
| IMCI | - | Integrated Management of Childhood Illness |
| KPC | - | Knowledge, Practice, Coverage |
| LHB | - | Local health board |
| MOH | - | Ministry of Health |
| NGO | - | Non-governmental organization |
| OC | - | Oversight Committee |
| PAP | - | Papanicolaou |
| Polio1 | - | Polio vaccine, first dose |
| Polio3 | - | Polio vaccine, third dose |
| PSI | - | Population Services International |
| PVC | - | Private Voluntary Cooperation |
| PVO | - | Private voluntary organization |
| SEDES | - | Servicio Departamental of Salud (Departmental Health Services) |
| SNIS | - | Subsistema de Informacion de Actividades en Salud (Subsystem of Information on Health Activities) |
| TBA | - | Traditional birth attendant |
| TT | - | Tetanus toxoid |
| TT2 | - | Tetanus toxoid, second dose |
| USAID | - | United States Agency for International Development |

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1. Executive Summary

Andean Rural Health Care (ARHC)/Consejo de Salud Rural Andino (CSRA) received a four-year grant for a child survival and maternal health project which began on October 1, 1997. This is the report of the mid-term evaluation of that project which was conducted in December 1999.

The ARHC/CSRA child survival and maternal health project is being carried out in three municipalities in the Altiplano Region (high plains) of La Paz Department near Lake Titicaca: Carabuco/Ambana, Ancoraimes, and Puerto Acosta. The altitude in the project area ranges from 11,500 to over 15,000 feet above sea level. The estimated total population of the project area is 43,375, almost exclusively Aymara Indian. The general program strategy is to assist the MOH and the respective municipal governments in managing a clinic- and community-based health care system.

The program interventions include immunization, nutrition and micronutrients, control of diarrheal disease, pneumonia case management, maternal and newborn care, child spacing, basic curative services, and program strengthening.

Achievements were remarkably high for vaccination coverage, a MOH-priority. Vaccination coverage increased in all areas since the project began with rapid increases in Puerto Acosta and Ambana where CSRA began working more recently. Children fully-vaccinated by age 23 months ranged from a low of 43 percent in Puerto Acosta, compared to a baseline of only 3 percent, to a high of 94 percent in Carabuco, which had a baseline coverage of 83 percent.

For nutrition, the project was successful in its strategy to enroll children early in growth monitoring. In all project municipalities, the proportion enrolled in growth monitoring during the first month of life increased from 1998 to 1999, approaching or exceeding the 1999 goal in all municipalities. Carabuco had the highest proportion of children enrolled early, 87 percent for 1999, followed by Puerto Acosta with 69 percent, Ancoraimes with 57 percent, and Ambana, with 37 percent. The proportion of children under age two whose growth was also monitored according to the established norm exceeded the 1999 goal in all communities as did the proportion of children 6-11 months receiving Vitamin A. An intensive counseling program for malnourished children did not fair as well as hoped. This strategy needs to be revisited.

Based upon data available at mid-term, members of the evaluation team believe that a large proportion of mothers seek help when they see signs of dehydration and that there is good follow-up of cases of diarrhea with dehydration which are detected. For pneumonia, on the other hand, few mothers interviewed knew the danger signs of pneumonia and when to bring their child to a health facility. Mother's knowledge of pneumonia and danger signs was definitely not as good as their knowledge of diarrhea and dehydration. A review of data from the project information system in Ancoraimes indicated that nine children under five years of age had died of pneumonia in the area during the last year -- the greatest cause of death in children under five in the project municipality.

The proportion of pregnant women who had at least one prenatal visit exceeded the goal

in three of the four municipalities ranging from 33 percent in Ancoraimes to 100 percent in Carabuco. The proportion of women receiving iron-sulfate was relatively low. Efforts need to be strengthened in getting iron-sulfate tablets to pregnant women. Given the government and project emphasis on vaccination, two doses of tetanus toxoid (TT2) for pregnant women was above the goal in all communities ranging from 25 percent in Puerto Acosta to a high of 66 percent in Carabuco for 1999. Vitamin A coverage post-partum was also very high, approaching 100 percent in many communities. Follow-up of high-risk cases was below that which staff expected when planning services. Ancoraimes lagged behind with 24 percent follow-up of cases identified as high-risk. The proportion of births attended by trained health care workers, ranging from 68 percent in Carabuco to eight percent in Ambana, had increased in all municipalities during the last year.

At mid-term, data were available on new acceptors of family planning methods; but the contraceptive acceptance rate (CAR) was not known. The highest proportion of women accepting natural family planning was reported in Ancoraimes (11%), with modern methods receiving greatest acceptance in Carabuco (8%). Depo Provera has very recently been introduced and is rapidly gaining greater acceptance than other modern methods of family planning.

Overall constraints which affect all problem interventions include the disperse nature of the communities, migration which impedes follow-up, cultural differences between staff and community members, difficulties in communications, lack of adequate transport, and frequent changes in public policy.

CSRA has increased the capacity of its own staff as well as that of public sector employees who work within the network of health care services in the project area. Training includes human resource areas, for example leadership training, as well as training in technical areas. Members of the evaluation team felt that staff were well-trained from the auxiliary nurse through the physician level, with the possible exception of medical interns for which more intensive training is recommended. Although some promoters demonstrated good knowledge of the technical interventions and messages, others were not as well trained, especially for pneumonia. Recent improvements (checklists) have also been implemented for supervision. The health care infrastructure has been strengthened with new equipment installed, transport made available, and health care facilities remodeled and expanded. ARHC has supported the improvements in infrastructure by sending work teams to the project area. The information system strengthened. ARHC is also working to strengthen the Board of Directors.

CSRA is well on its way in meeting the sustainability indicators, as outlined in the DIP. The municipalities now support 26 percent of recurring costs and the support of CSRA-implemented health services by the government of Bolivia has been increased to 44 percent. This represents a 20 percent increase in municipal support during the last year, a 32 percent increase in support of the regional MOH, and a 31 percent increase in revenue generated through sales.

The priority recommendations are:

Program staff:

1. Immunization coverage is very high in Carabuco/Ambana and Ancoraines, but the proportion of children fully-covered needs to be increased in Puerto Acosta during the remainder of the project.
2. Growth monitoring has been very successful in terms of initiating early contact with health care providers and promoting regular contact where malnutrition as well as other problems can be addressed. Growth monitoring should be continued during the next two years of the project.
3. The strategy for improving the nutritional status of malnourished children is not working as well in some areas as others and should be revisited, perhaps using focus group studies to involve the communities in developing an acceptable strategy or identifying barriers to the acceptability of the present strategy.
4. The pneumonia case management strategy is weak. Efforts should be increased to train volunteers and mothers in how to recognize danger signs and when to bring children to a health facility. Communities should be prioritized according to whether there is good detection of pneumonia cases and efforts intensified in those communities with poor detection or child deaths due to pneumonia.
5. Prenatal care and follow-up for pregnant women at-risk needs to be strengthened through such means as monthly reviews of the list of registered pregnant women, increased information sharing between clinics and the community-based program, community censuses, pregnancy testing at health posts, and comprehensive health education from the beginning of pregnancy. Criteria for high-risk should also be reviewed.
6. The information system needs to be modified to report contraceptive acceptance rates.
7. Health education given to school-aged youth should be expanded.
8. Mothers forget messages that are not repeated. More repetition of health messages is needed in the communities.
9. The project needs to clearly determine its strategy for working with volunteer health promoters and develop a consistent policy toward incentives across project areas.
10. Communication needs to be improved, to the extent possible given the conditions, between the La Paz headquarters and the field offices as well as in the field between members of the facility-based health teams and the volunteers and communities.
11. Although program management is strong, especially financial management, written manuals should be developed for policies and procedures.

12. The logistics system is relatively weak, compared to other management systems. External technical assistance is needed to improve this system.
13. The census-based information system has produced reliable data. The project should continue to conduct censuses in willing communities.

USAID/BHR/PVC:

14. USAID should assist CSRA in identifying external technical assistance, perhaps through centrally-funded projects, in order to improve the logistics system as well as conduct special studies.

Collaborating partners:

15. The CSRA sustainability strategy is being successfully implemented. The strategy of increasing support from the municipalities and the regional MOH should continue while beginning to discuss a transferal plan of the project to the government in Carabuco Municipality. Discussions should begin early in 2000, as soon as the new municipal government is in place, to ensure a smooth transition at the end of the project.
16. The present strategies for capacity building within the public sector have been very successful and should be continued. The planned courses in teamwork should be delivered in the field, with appropriate follow-up, to maintain the momentum of these successful efforts.
17. CSRA should continue to explore areas of collaboration with other NGOs, such as PLAN International in its sponsored communities and with Intervida's school-based program.

2. Assessment of Progress towards Achievement of Program Objectives

A. Technical Approach

Participations of the evaluation team identified the following lessons learned with regard to the overall technical approach:

- *Prioritizing and intensifying activities for some interventions also means paying less attention to others.*
- *Solutions to problems should start from the experience acquired by the staff and not from strategies imported from outside the project.*

(1) Brief Overview

The ARHC/CSRA child survival and maternal health project is being carried out in three municipalities in the Altiplano Region (high plains) of La Paz Department near Lake Titicaca:

Carabuco/Ambana, Ancoraimes, and Puerto Acosta. The altitude in the project area ranges from 11,500 to over 15,000 feet above sea level. The estimated total population of the project area is 43,375, almost exclusively Aymara Indian.

The program interventions include immunization, nutrition and micronutrients, control of diarrheal disease, pneumonia case management, maternal and newborn care, child spacing, basic curative services, and program strengthening.

Data available to measure indicators of progress at mid-term include clinic service statistics and information on home visits. Child health indicators with available data include vaccination coverage, growth monitoring, and Vitamin A coverage. Maternal indicators with available data include prenatal care, delivery, vaccination, family planning, and verbal autopsies of maternal deaths. Many of the interventions can only be measured by a knowledge, practice, and coverage (KPC) survey that was done at baseline and will be repeated for the final evaluation.

The general program strategy is to assist the MOH and the respective municipal governments in managing a clinic- and community-based health care system. The MOH and municipal governments were paying 44 percent of the costs of the project as of February 1999.

The field program summary, program goals and objectives, detailed program location, program design, partnerships, and health information system from the Detailed Implementation Plan (DIP) are all included in Attachment 1.

This report details the results of a mid-term evaluation conducted in December 1999. The four-year project began on October 1, 1997. The methods used in the evaluation, evaluation team members, and list of persons interviewed are included in Attachments 2, 3, and 4.

(2) Progress by Intervention Area

The following table displays the project indicators, as proposed in the DIP, for which data were available at mid-term, along with measures of progress toward the objective for each indicator for 1998 and 1999:

**Child Survival and Maternal Health Goals and Indicators by Year and Municipality
1998 and 1999**

10/10/99
10/10/99
10/10/99
10/10/99

| # | Indicator | Puerto Acosta | | | | | | Carabuco | | | | | | Ambana | | | | | | Ancoraimes | | | | | |
|----------|--|---------------|-----|-------|--------|-----|------|----------|-----|------|--------|-----|-------|--------|-----|------|--------|-----|------|------------|-----|------|--------|-----|-------|
| | | Year 1 | | | Year 2 | | | Year 1 | | | Year 2 | | | Year 1 | | | Year 2 | | | Year 1 | | | Year 2 | | |
| | | Goal | No. | % | Goal | No. | % | Goal | No. | % | Goal | No. | % | Goal | No. | % | Goal | No. | % | Goal | No. | % | Goal | No. | % |
| CHILDREN | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Polio, 1st Dose, <1 Yr. | 100 | 424 | 84.7 | 100 | 423 | 86.2 | 100 | 117 | 86 | 100 | 106 | 100 | 100 | 186 | 122 | 100 | 155 | 103 | 100 | 392 | 105 | 100 | 368 | 92.2 |
| 2 | Polio, 3rd Dose, <1 Yr. | 100 | 321 | 64.1 | 100 | 340 | 69.3 | 100 | 143 | 105 | 100 | 110 | 104 | 100 | 134 | 88.2 | 100 | 151 | 99.9 | 100 | 346 | 93 | 100 | 364 | 91.2 |
| 3 | DPT, 1st Dose, <1 Yr. | 100 | 441 | 88.1 | 100 | 414 | 84.4 | 100 | 117 | 86 | 100 | 106 | 100 | 100 | 187 | 123 | 100 | 151 | 99.9 | 100 | 387 | 104 | 100 | 360 | 90.2 |
| 4 | DPT, 3rd Dose, <1 Yr. | 100 | 343 | 68.5 | 100 | 339 | 69.1 | 100 | 143 | 105 | 100 | 110 | 104 | 100 | 134 | 88.2 | 100 | 151 | 99.9 | 100 | 345 | 92.7 | 100 | 362 | 90.7 |
| 5 | BCG, <1 Yr. | 100 | 356 | 71.1 | 100 | 318 | 64.8 | 100 | 129 | 94.9 | 100 | 108 | 102 | 100 | 148 | 97.4 | 100 | 122 | 80.7 | 100 | 355 | 95.4 | 100 | 394 | 98.8 |
| 6 | Measles, 12-23 Mos. | 100 | 497 | 121 | 100 | 136 | 90.2 | 100 | 139 | 158 | 100 | 114 | 92.7 | 100 | 190 | 156 | 100 | 162 | 131 | 100 | 334 | 110 | 100 | 346 | 105.7 |
| 7 | Fully-Covered, 12-23 Mo | 35 | 319 | 77.7 | 45 | 251 | 43 | 90 | 125 | 142 | 90 | 112 | 94.1 | 20 | 103 | 62 | 30 | 134 | 79.3 | 65 | 297 | 97.4 | 75 | 307 | 91.6 |
| 8 | Fully-Covered, 12-15 Mo | 5 | NA | | 10 | 177 | 42.4 | 58 | NA | | 63 | 33 | 91.7 | 5 | NA | | 10 | 119 | 70.4 | 30 | NA | | 35 | 271 | 80.9 |
| 9 | Growth Mon., 0-23 Mos. | 10 | NA | | 20 | 276 | 33.7 | 75 | NA | | 80 | 162 | 83.5 | 10 | NA | | 20 | 129 | 42.6 | 35 | NA | | 45 | 433 | 67.9 |
| 10 | Growth Mon., 1st Mo. | 0 | 92 | 46.5 | 10 | 178 | 69.3 | 90 | 96 | 82.1 | 90 | 75 | 87.2 | 5 | 57 | 34.1 | 10 | 55 | 37.4 | 30 | 155 | 46 | 40 | 167 | 57.4 |
| 11 | V. A, 1 Dose, 6-11 Mo | 10 | NA | | 25 | 265 | 56 | 55 | NA | | 65 | 42 | 71.2 | 10 | NA | | 25 | 52 | 61.2 | 35 | NA | | 50 | 106 | 81.5 |
| 12 | V. A, 1 Dose, 12-23 Mo | 10 | NA | | 25 | 369 | 61.6 | 55 | NA | | 65 | NA | | 10 | NA | | 25 | NA | | 35 | NA | | 50 | 333 | 96.8 |
| WOMEN | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1st Prenatal Visit | 15 | 188 | 25.1 | 20 | 291 | 39.6 | 45 | 102 | 37.2 | 55 | 121 | 113.2 | 10 | 94 | 41.2 | 20 | 103 | 45.5 | 35 | 181 | 32.4 | 45 | 203 | 33.1 |
| 2 | Births Attended by Trained Attendant | 10 | 57 | 7.6 | 15 | 49 | 6.7 | 20 | 31 | 11.3 | 25 | 73 | 68.2 | 5 | 16 | 7 | 10 | 18 | 8 | 15 | 109 | 19.5 | 20 | 175 | 29.3 |
| 3 | Pregnant Women Rec'd 90 Tablets Iron/Sulfate | 15 | NA | | 20 | 60 | 20.6 | 20 | NA | | 30 | 20 | 16.5 | 5 | NA | | 20 | 11 | 10.7 | 20 | NA | | 40 | 43 | 21.2 |
| 4 | Vit. A Post-Natal | | 142 | 109.2 | 30 | 175 | | 45 | 89 | 96.7 | 60 | 101 | 98.1 | 10 | 63 | 100 | 20 | 73 | 100 | 45 | NA | | 60 | 501 | 83.8 |
| 5 | ARO with Follow-up | 80 | NA | | 85 | 27 | 35.5 | 50 | NA | | 60 | 19 | 36.5 | 20 | NA | | 35 | 20 | 30.8 | 67 | NA | | 75 | 30 | 24.2 |
| 6 | Preg. Women, TT2 | 15 | 32 | 23.5 | 20 | 53 | 25.5 | 40 | 61 | 71.8 | 45 | 75 | 66.4 | 25 | 13 | 39.4 | 30 | 48 | 58.5 | 45 | 138 | 67.3 | 50 | 147 | 57.9 |
| 7 | Women 15-49 Using Natural Family Planning | 20 | 82 | 1.8 | | 92 | 2.1 | 40 | 117 | 9 | | 121 | 9.4 | 40 | 76 | 5.6 | | 92 | 6.9 | 50 | 103 | 3.1 | | 397 | 11.2 |
| 8 | Women 15-49 Using Modern Method | 5 | 62 | 1.4 | | 113 | 2.6 | 10 | 27 | 2 | | 100 | 7.8 | 5 | 36 | 2.7 | | 81 | 6 | 5 | 38 | 1.2 | | 171 | 4.8 |

NA=Not Available

Percentages over 100 most likely result from inaccurate data on the total population in communities which have not had a census conducted by the project.

Relevant indicators will be discussed within the context of the detailed discussion of interventions [2.A.(2)(a-g)]. Bar charts comparing the results for each indicator with the objective, by geographic location and year, are graphically displayed in Attachment 5.

A lesson learned, as identified in a mid-term evaluation workshop in La Paz, is:

- *All personnel should know the objectives as well as the utility and importance of all activities for achieving the objectives.*

(a) Immunization

The immunization strategy includes vaccination of children by age one year with Bacilli Calmette-Guerin (BCG); diphtheria, pertussis, and tetanus vaccine (DPT); anti-polio; and measles vaccine and of women of child bearing age with at least two doses of tetanus toxoid (TT).

For both Ambana and Carabuco in 1999, the information system shows 100 percent coverage with the first dose of DPT (DPT1) and for Ancoraimes 90 percent. The lowest coverage rate of 84 percent was reported for Puerto Acosta, as seen in the table. (See also Attachment 5 for bar charts.) These figures are rather remarkable considering that baseline coverage was only 18 percent in Puerto Acosta when CSRA began work there in 1996, and 47 percent in Ambana, where CSRA began work in 1997. Virtually no dropouts occurred in Ambana, Carabuco, or Ancoraimes from DPT1 to DPT3. The dropout rate was only 15 percent for Puerto Acosta, where the lowest coverage was reported for DPT1. Coverage for anti-polio 1 and 3 was nearly identical to that for DPT1 and 3, not surprisingly since these vaccines are given according to the same schedule.

Coverage for BCG in 1999 approached the 100 percent goal in Carabuco and Ancoraimes. BCG coverage was 81 percent in Ambana, compared to a baseline of only 39 percent, as reported in the DIP, and 65 percent at mid-term for Puerto Acosta. (No baseline data are available for BCG coverage for Puerto Acosta.) Coverage with measles vaccine was over 90 percent in all municipalities.

Children fully-covered by age 23 months ranged from a low of 43 percent in Puerto Acosta, compared to a baseline of only 3 percent, to a high of 94 percent in Carabuco, which had a baseline coverage of 83 percent.

In short, vaccination coverage has increased in all areas since the project began with rapid increases in Puerto Acosta and Ambana where CSRA has begun working more recently. Coverage, nonetheless, needs to be increased in Puerto Acosta during the remainder of the project.

Workshops were held in each of the municipalities on the technical interventions, including immunization. The following strengths and weaknesses were identified at the workshops, along with recommendations:

| Strengths/Threats | Weaknesses/Threats |
|---|---|
| <p>A major effort was made in the measles eradication campaigns.</p> <p>Vaccination coverage has increased rapidly, especially in new working areas.</p> <p>There is good communication between the health team and the communities in some areas (e.g. Ambana).</p> <p>Promoters are trained to assist in vaccination campaigns by talking to the mothers about vaccination.</p> <p>A census has been taken in more communities this year leading to better population statistics to be used for calculating coverage rates.</p> <p>The health teams work together during campaigns.</p> <p>There is good follow-up.</p> <p>TT is better accepted in the schools with younger women.</p> | <p>Some communities reject the concept of vaccination and hide their children when the vaccination team visits house-to-house.</p> <p>DPT and TT are sometimes rejected because of side effects.</p> <p>There are periodic shortages of vaccination supplies and vaccines, especially BCG.</p> <p>Some children are vaccinated late.</p> <p>Local authorities sometimes do not assist during campaigns.</p> <p>Migration outside the area and a floating population within makes follow-up difficult. (In two sectors of Ancoraines, 18% of children could not be located for follow-up because they had moved outside the area.)</p> <p>The communities are disperse.</p> <p>There is insufficient transport for vaccination workers.</p> <p>Some religious sects obstruct vaccination activities.</p> <p>Some health workers complain that vaccination takes so much time, given the emphasis of the MOH in this program, that they must neglect other interventions.</p> |

Recommendations

Better communication is needed between the health team and the promoter during vaccination campaigns in Chuani (Ambana).

Auxiliary nurses need to hold monthly meetings with more promoters.

More promoters need to be trained.

Project staff should solicit BCG vaccine in single doses and preposition reserve supplies according to the population and demand.

The project should coordinate with district education officials to reduce the resistance to TT among students and explain the benefits and side effects to teachers to increase their support.

More cold chain equipment should be made available in the health posts. This will reduce the time which auxiliary nurses need to collect vaccines from health centers and hospitals thereby increasing the time which can be spent on interventions apart from immunization.

Staff should continue the TT program in the schools where acceptance is greater.

Lists of women of child-bearing age should be reviewed to verify coverage with TT, and the program should be coordinated with community leaders.

Lessons learned include:

- *Prior to formulating goals and indicators for immunization, one should establish criteria for implementation and follow-up.*
- *It is important to identify the reasons why some families refuse to have their children vaccinated.*

(b) Nutrition and Micronutrients

The basic CSRA strategies for nutrition and micronutrients include:

- Growth monitoring and counseling every two months for children under two and every four months for children 2-5;
- Vitamin A for children 6 months to six years and for postpartum women;
- Iron-folate tablets to pregnant women; and,
- Intensive counseling and feeding during a two-week period for malnourished children (i.e.,

the "Hearth" Model referred to in the DIP).

The table in Section 2.a.(2) provides data on growth monitoring and Vitamin A provision. Part of the growth monitoring strategy is to enroll children early. Indicator # 10 shows the number and proportion of children enrolled in growth monitoring during their first month of life. In all four project areas, the proportion enrolled during the first month of life increased between 1998 to 1999. Carabuco had the highest proportion of children enrolled early, 87 percent for 1999, followed by Puerto Acosta with 69 percent, Ancoraimes with 57 percent, and Ambana, the newest project area, with 37 percent enrolled.

Children whose growth was monitored every two months from 0-23 months of age ranged from 84 percent in Carabuco in 1999 to 34 percent in Puerto Acosta, exceeding the preset goals in all municipalities.

For Vitamin A, the proportion of children 6-11 months receiving Vitamin A in 1999, according to established norms, exceeded the preestablished goals for all municipalities. For children aged 6-11 months, from 56 percent (Puerto Acosta) to 82 percent (Ancoraimes) received Vitamin A; and for children 12-23 months, 62 percent received Vitamin A in Puerto Acosta and 97 percent in Ancoraimes. Nearly all women received Vitamin A postpartum.

The intensive counselling program for malnourished children did not fair as well as the regular growth monitoring and counselling program. Eight mothers with children under two, of the 62 identified as malnourished in Carabuco, were given intensive counselling in 1999, seven hours a day for a two-week period, along with food which was prepared on-site for the mothers and children. Unfortunately, most of the children became ill with a cold during the session. As a result, five children did not gain weight, and the others gained very little. Only three children were rehabilitated. The positive impact which staff were hoping to demonstrate did not occur. Staff tried to organize a second group of mothers, but without generating much interest. Staff have also tried to arrange peer counselling between mothers with children growing well and not growing well in Carabuco, again without generating interest in the community.

The manager for Carabuco/Ambana felt that staff try harder to counsel parents in Ambana where the counselling strategy has been newly introduced compared to staff in Carabuco who have become discouraged in trying to change behavior. Available data, however, do not show any greater success for Ambana than Carabuco. Of 98 malnourished children under two identified in 1999 in Ambana, nine were given intensive counselling. Only five of these were found to have gained at least 250 grams after 15 days; and only one was rehabilitated.

CSRA needs to revisit the present strategy for dealing with malnourished children, perhaps using focus groups to help identify a strategy acceptable to the community. In Ancoraimes, CSRA is planning a new micro-credit program to increase agricultural production and income that will include nutritional counselling.

During the evaluation, staff identified in a workshop the following strengths, weaknesses, and recommendations for the nutrition program:

| Strengths/Threats | Weaknesses/Threats |
|--|---|
| <p>The nutritional status of children has improved in some families with growth monitoring and counselling.</p> <p>Mothers are interested in learning how to improve the nutrition of their children.</p> <p>Staff have embraced counselling as a possible effective strategy.</p> <p>Community leaders help with growth monitoring.</p> <p>Follow-up is usually good for growth monitoring.</p> <p>Vitamin A is well accepted in the communities.</p> <p>There are good Vitamin A supplies.</p> <p>There are manuals, training materials, and persons trained in both nutritional counselling and nutritional rehabilitation.</p> | <p>A barrier is that feeding children does not have high priority within many families.</p> <p>Children are weaned early and given inappropriate weaning foods before age one.</p> <p>There is a lack of an adequate number of planned visits to communities to follow-up malnourished children every 15 days.</p> <p>There is a lack of sufficient transport for follow-up.</p> <p>Follow-up is not as good for children 1-4 years of age who have already received all their vaccinations.</p> <p>Communities are disperse.</p> |
| Recommendations | |
| <p>Continue with nutritional counselling and reinforce its value to all members of the health team.</p> <p>Involve promoters and local authorities to a greater extent in the nutrition program.</p> <p>Demonstrate successes to other projects.</p> <p>Integrate nutrition and Vitamin A provision with vaccination activities.</p> <p>The auxiliary nurse should work together with promoters to improve Vitamin A coverage in order to prevent some cases of respiratory infections and diarrhea.</p> | |

A lesson learned is:

- *Follow-up for malnourished children must be assured. Commitment and dedication of health care personnel is needed for good results.*

(c) Control of Diarrheal Disease

Quantitative data for the indicators being tracked for diarrheal disease, as proposed in the DIP, are not yet available. These data will be available after the final KPC survey. In group interviews with mothers, however, many knew about dehydration, the danger signs for dehydration, and how to use oral rehydration solution and other home-available fluids to rehydrate the child.

SNIS data (the health information system of the MOH) compare the number of cases that present at health facilities with a number calculated based upon expected incidence. On the basis of SNIS data, staff have concluded that a large proportion of mothers seek help when they see signs of dehydration. In Puerto Acosta, for example, 85 percent of mothers are estimated to have sought help when their child showed signs of dehydration. These data should be treated with caution, as they are calculations based upon MOH formulas and the expected number of cases. The validity or reliability of this method has not been demonstrated. Staff feel that there is good follow-up of cases of diarrhea with dehydration which are detected. In Ancoraimes, for example, health staff followed-up on 57 percent of all cases of diarrhea with dehydration detected.

A review of health statistics in Ancoraimes during the mid-term evaluation indicated five deaths due to diarrhea in the last year for children under five, the second largest cause of death, after pneumonia.

Based largely upon SNIS data and experiences working in the clinics and the communities, staff identified the following strengths, weaknesses, and recommendations:

| Strengths/Tretas | Weaknesses/Threats |
|---|--|
| There is good followup for cases of diarrhea with dehydration which are detected. "Seguro Basico" or basic health insurance is a strength. | Few cases of diarrhea are detected in some geographic sectors. Insufficient personnel are available for follow-up. The community does not have confidence in health care personnel. Parents do not understand the seriousness of diarrhea. The disease is considered common and normal. |
| Recommendations | |
| Staff should continue IEC efforts directed toward women of child-bearing age and their husbands. | |

(d) Pneumonia Case Management

Quantitative data to measure the indicators being tracked in the DIP are to be collected in the final KPC survey. As was the case with diarrheal diseases, however, data are available for Ancoraimes, which compare the number of cases of acute respiratory infections (ARIs) with the expected number of cases. (The precautions mentioned in the previous section still apply.) Using the MOH formulas for the expected number of cases, an estimated 11 percent of cases of ARIs in children under five years are being detected, compared to a goal of 50 percent. About a third of ARI cases (36 percent) are being followed-up, compared to the 50 percent goal; and about half (56%) are looking for help, compared to a 90 percent goal. On the basis of these data along with the number of deaths and the poor knowledge of danger signs of mothers interviewed, one can conclude that more intensive health education is needed for ARIs and pneumonia.

In interviews with mothers, few knew the danger signs of pneumonia and when to bring their child to a health facility. Mother's knowledge of pneumonia and danger signs was definitely not as good as their knowledge of diarrhea and dehydration.

A review of data from the project information system in Ancoraimes indicated that nine children under five years of age had died of pneumonia in the area during the last year – the greatest cause of death in children under five in the project municipality.

In the workshops held within the municipalities, participants identified the following strengths and weaknesses and made the following recommendations:

| Strengths/Threats | Weaknesses/Threats |
|--|---|
| There is good detection of pneumonias in some areas, such as Lacay and Maca Maca, based upon MOH formulas of expected cases. | The number of child deaths due to pneumonia is alarming. In a workshop to analyze mortality in children <5, participants determined that children with pneumonia were dying because mothers did not recognize danger signs and bring their children to a health facility. Follow-up of pneumonia cases is not adequate. There is poor detection of pneumonia in some areas, based upon MOH formulas of expected cases. Mothers did not show good knowledge of pneumonia danger signs during evaluation interviews. Communities are disperse. |

| Recommendations |
|--|
| Communities should be prioritized according to whether there is good detection of pneumonia and efforts intensified in those communities with poor detection or with child deaths. |
| Staff should analyze in-depth verbal autopsy reports of pneumonia cases to determine if children are dying because they are not taking medicine, because their mothers are not recognizing danger signs, etc. The strategy for ARIs/pneumonia should then be refined based upon this analysis. |
| Mothers should receive more education for ARIs and pneumonia. |
| Training of promoters in ARIs and pneumonia should be improved. |
| Adapt messages to the reality of each geographic sector. |

(e) Maternal and Newborn Care

Seven of the indicators for which data were available at mid-term pertain to maternal care. The proportion of pregnant women who had at least one prenatal visit in 1999 exceeded the goal in three of the four municipalities ranging from 33 percent in Ancoraimes to 100 percent in Carabuco. In Ambana, 46 percent received prenatal care and in Puerto Acosta 40 percent received prenatal care. The proportion of women who received iron-sulfate tablets at their first prenatal visit was relatively low ranging from 11 percent in Ambana to a high of 21 percent in Puerto Acosta and Ancoraimes. Efforts need to be strengthened in getting iron-sulfate tablets to pregnant women, especially since there is good acceptance of the tablets in the communities. Given the government and project emphasis on vaccination, TT2 for pregnant women was above the goal in all communities ranging from 26 percent in Puerto Acosta to a high of 66 percent in Carabuco for 1999. Vitamin A coverage post-partum was also very high, approaching 100 percent in many communities. Follow-up of high-risk cases was below that which staff expected when planning services. Ancoraimes lagged farthest behind with 24 percent follow-up of cases identified as high-risk. The highest follow-up (36 percent) was reported for Puerto Acosta. Births attended by trained health care workers, including trained traditional birth attendants (TBAs) increased in all municipalities during the last year, ranging from 68 percent in Carabuco to eight percent in Ambana. Many women still prefer delivering at home with the assistance of husbands and family members, however.

Members of the evaluation team have identified the following strengths and weaknesses and have made recommendations, as listed:

| Strengths/Treasures | Weaknesses/Threats |
|---|--|
| <p>All health posts should have pregnancy tests within 12 months.</p> <p>There is good acceptance of iron-sulfate tablets during pregnancy.</p> | <p>Coverage for PAP tests is very low due to lack of training of auxiliary nurses and cultural modesty.</p> <p>According to the MOH formulas of expected births, all pregnancies (and births) are not being registered. (Note: CSRA staff find the MOH formulas to be inaccurate. The number of births in communities in Carabuco with a complete census is less than half MOH estimates.)</p> <p>High-risk pregnant women do not always come to health facilities for appropriate follow-up.</p> <p>Women hide their pregnancies, and high-risk cases are being detected late.</p> <p>More aggressive case-finding is needed for prenatal care.</p> <p>There is no way to know if pregnant women are actually taking iron-sulfate tablets or not.</p> |

Recommendations

Youth from the age of 12 should received health education to increase acceptance of PAP tests.

Equip health posts with supplies necessary to attend births.

Coordinate with the municipal governments to pay midwives who have previously attended a course at the hospitals.

Define criteria for classifying high-risk obstetric cases, and adapt national norms to the conditions in the rural altiplano.

Prenatal care and follow-up of at-risk pregnant women needs to be strengthened, as follows:

- The list of registered pregnant women should be reviewed in monthly meetings to ensure better follow-up.
- Information should be shared between the clinics and the community-based program.
- Basic Health Insurance ("the Seguro Basico de Salud") needs to be promoted.
- Continue efforts to conduct censuses in the communities to increase the number of pregnant women and subsequent births detected.
- The coordinator of each area must work closely with auxiliary nurses as pregnancy tests become available at each health post to ensure that the nurses are well trained to conduct and interpret the tests.
- Pregnant women must receive comprehensive health education from the beginning of pregnancy to avoid hemorrhages during the first trimester of pregnancy.
- Health education for pregnant women should explain the benefits of taking iron-sulfate for the soon-to-born child as well as the mother.
- Staff should educate pregnant women on the laboratory tests which they should have performed at a health facility.

A lesson learned is:

- *The predisposition, attitude, and gender of medical interns influence the demand for birthing and other services. (Clients prefer female doctors for obstetric care.)*

(f) Child Spacing

At the time of the mid-term, data were available on new acceptors of family planning methods. The highest proportion of women accepting natural family planning was reported in Ancoraimes (11%), with modern methods receiving greatest acceptance in Carabuco (8%). These data are misleading, however. The project information system reports only women who have newly accepted family planning during the year rather than all family planning users. This deficiency in the project information systems needs to be corrected so that true contraceptive acceptance rates (CARs) will be known for program planning. As Depo Provera has very recently been introduced and is rapidly gaining greater acceptance than other modern methods of family planning, CARs are likely to increase to a much greater extent during the next two years of the project compared to the increase from baseline to mid-term.

Strengths, weaknesses, and recommendations identified using participatory methods during the evaluation include:

| Strengths/Threats | Weaknesses/Threats |
|--|--|
| The demand for Depo Provera has been good and should increase. | Some school teachers have rejected child spacing education in the schools. |
| Recommendations | |
| Youth from the age of 12 should be given health education for child spacing services working more intensively through the school system. | |

A lesson learned is:

- *Offering a modern family planning method requested by community members (i.e. injectables), as opposed to one less culturally acceptable, doubled the acceptance rates. It is important to reinforce this in staff training.*

(g) Basic Curative Services

Basic curative services are offered to the entire population in health care facilities, although services to women and children receive greatest emphasis. In 1998, there were 12,803 consultations in health care facilities under project management; and in 1999 there was a slight increase to 13,234 consultations.

The following strengths and weaknesses were identified by members of the evaluation team and recommendations made:

| Strengths/Threats | Weaknesses/Threats |
|--|---|
| <p>Annual objectives for attending patients have been increased in Ancoraimes.</p> <p>More than half the patients at risk receive follow-up in Ancoraimes.</p> <p>The number of tuberculosis cases detected in Ancoraimes has increased two-fold in the last year.</p> <p>Clinical histories are being taken this year to a much greater extent than previously.</p> <p>In Carabuco, there is good detection of respiratory symptoms.</p> <p>There has been good promotion of Basic Health Insurance ("Seguro Basico de Salud"), and patients come to the health facilities.</p> <p>Each municipality has complete staff and equipment to provide dental care.</p> <p>There is good cost recovery for dental care.</p> | <p>There is a delay in receiving information in Ambana from the laboratory in Carabuco regarding tuberculosis.</p> <p>The proportion of patients who return to health care facilities for follow-up visits is low in Ancoraimes.</p> <p>Payment for services limits access in Ambana.</p> <p>In Carabuco, supplies to collect laboratory samples, especially sputum samples, are not adequate.</p> <p>Coverage is low for dental care.</p> <p>Some NGOs give dental care free of charge which interferes with cost recovery at CSRA/MOH facilities.</p> <p>Disperse communities and long distances to health facilities decreases access.</p> |

Recommendations

In Carabuco, deliver adequate supplies for detection and treatment of tuberculosis according to needs.

Send a treatment card with patients referred to the hospital for tuberculosis.

Improve follow-up to the at-risk population, especially children.

Capture more patients through improved services, health fairs, and improved access to ambulance services.

Promote the concept of Basic Health Insurance more.

Do active case finding for tuberculosis.

Give more training to laboratory personnel for tuberculosis tests. Look for more laboratories in Puerto Acosta for quality assurance.

Provide more services through promoters.

Give a hemoglobin test to all women who test positive for pregnancy and all women who come for prenatal care.

Study the cost of parasite examinations.

(h) Program Strengthening

See Sections 2.b.3 and 3.H.

(3) Special Studies and Approaches

At the end of 1999, CSRA commissioned an anthropological study entitled:

Sexual and Reproductive Health in Four Aymara Communities in the Working Area of CSRA: Points of View of Health Personnel and the Community

The study was based on in-depth interviews of health personnel and community members in order to investigate the cultural understandings of Aymara Indians and how these understandings affect health care.

According to the study findings, there are two levels of problems that impede the delivery of health care services to the communities. First, investigators noted a lack of respect for Aymara customs in some encounters with health care personnel, especially with regard to birthing customs. The study recommends authorizing husbands and other relatives to be present during

birth. Second, health care personnel do not understand how Aymara Indians regard the body and biology. For the Aymara, the body serves to give a certain materiality to feelings and spirituality. Illnesses are not focused in the body but rather in images of their spirituality. The spirit of a newborn is so fragile that it can escape at any moment, and certain spirits can enter and cause illness. Spirituality is prioritized above the body, which has a secondary status.

Traditional medicine, which focuses upon spirituality, plays a fundamental role in Aymara society. Aymaras have an understanding that Western medicine can cure the biological and material dimension of the body only.

As this important anthropological study was only completed weeks before the mid-term evaluation, CSRA staff have not yet fully digested its findings and recommendations. Copies of the report have been distributed to key staff.

B. Cross Cutting Approaches

(1) Community Participation

Since the communities within the CSRA project areas are so disperse, there is no real concept of "community mobilization." Rather, staff think in terms of "community participation." Activities undertaken by the project, which have promoted community involvement, have included taking community censuses, vaccination campaigns, and health fairs. The participation in community censuses has helped to develop a strong information system which is used for follow-up of at risk cases, especially of pregnant women and malnourished children, and has resulted in better information on the overall population which is needed to compute coverage rates.

To date, the number of communities in which a census has been taken is as follows:

Communities with and without a Census by Municipality, December 1999

| No. Communities | Ancoraimes | Carabuco | Ambana | Puerto Acosta |
|-------------------|------------|----------|--------|---------------|
| With Census | 44 | 28 | 14 | 19 |
| Without a Census | 8 | 0 | 22 | 94 |
| Total Communities | 52 | 28 | 36 | 113 |

Training health promoters has also been a way of increasing community participation. There are 17 trained and active promoters in Ancoraimes, 12 in Carabuco, 16 in Ambana, and about 15 in Puerto Acosta.

Active participation is lacking in most communities, however. Community members, for example, generally do not gather together for vaccination and growth monitoring which instead requires health workers to visit house-to-house. The biggest barriers in preventing members of the community from participating and benefiting from community health activities are the distances between communities and difficulties in communication with health care personnel from a different cultural background. The communities are very disperse. This not only makes it difficult for community members to come to health facilities and for auxiliary nurses and

promoters to reach households in the community-based program, but it also works against developing a "sense of community." The communities are also somewhat migratory, with community members leaving the countryside periodically to seek seasonal employment. This interferes with follow-up.

Security is not an issue in the area for health workers. The communities are free from violence directed toward visitors, although there is domestic violence. Some communities are not reachable by road, especially after heavy rains. Communication is a major barrier, however, to efficient functioning of the program. Two of the four communities do not have telephone connections, although the project does maintain radio contact with these communities. On an interpersonal level, communication between community members and health facility staff is sometimes impaired by the lack of a common language.

Strengths and weaknesses of community participation are noted below along with recommendations of members of the evaluation team for how participation may be strengthened:

| Strengths/Threats | Weaknesses/Threats |
|--|---|
| <p>Members of the community participate in censuses and vaccination campaigns.</p> <p>Leaders identify children who should be vaccinated.</p> <p>Mothers participate in meetings, vaccination sessions, and health fairs, and they solicit the help of auxiliary nurses when they are not at the health post.</p> | <p>The communities are disperse.</p> <p>There are habits and customs that block communication between health personnel and the community.</p> <p>Some health personnel who work in the community do not speak Aymara.</p> |
| Recommendations | |
| <p>Investigate non-economic incentives for promoters.</p> <p>Look for ways in which the community will participate more actively in health activities.</p> <p>CSRA should continue trying to hire auxiliary nurses and coordinators to work in the community who speak Aymara and perhaps offer classes in basic Aymara to health personnel.</p> | |

Lessons learned are:

- *Health personnel should take advantage of and respect positive health habits and customs of mothers and adapt them to ideal practices.*
- *Work should begin with a self-diagnosis of the community of their own problems and needs.*

- *An introduction should be given to leaders/promoters and health personnel so that they will better know health programs and services.*
- *Monthly sessions in self-esteem are needed in the communities, with follow-up.*
- *Interventions should be directed toward youth (i.e. adolescents) to help them to develop good health habits. Health education activities should be directed toward school groups in coordination with District Directors of Education and with teachers.*

(2) Communication for Behavior Change

Behavior change is measured in the baseline and final KPC surveys, in registers maintained by auxiliary nurses and promoters, and in household visits. The principle method of looking at changes in behavior on an on-going basis, however, is by reviewing data from registers. Data from these registers is compiled monthly by hand and used primarily by auxiliary nurses, supervisors, and project managers.

The effectiveness of this system for measuring behavior change varies according to the commitment of promoters and auxiliary nurses to complete the registers. In some communities, the promoters and nurses do not fill out the registers completely.

The materials currently being used are seen as appropriate and effective by members of the health care team from the promoter to the MOH district director level. Materials include one flipchart, posters on health facility walls, and matchboxes with health messages. The messages are technically up-to-date in the flipchart used by auxiliary nurses and promoters, and the messages are the same as those used by the MOH. The MOH, however, emphasizes vaccination above all other interventions; and the project takes a more balanced approach addressing all of the most common causes of mortality and morbidity. Promoters and nurses both would like more variety in the health education materials, and staff identified the development of more materials as an area where some improvement is needed. Some promoters noted that mothers did not remember some messages, but all persons interviewed felt that there were no barriers for the mothers in initially understanding the messages in Aymara and in putting the messages into practice.

Strengths, weaknesses, and recommendations identified by staff in workshops in the communities and in La Paz include:

| Strengths/Opportunities | Weaknesses/Threats |
|---|---|
| <p>The project uses the same messages as the ministry, but it gives greater emphasis to the full range of child survival and maternal health interventions, not only to vaccination.</p> <p>The majority of mothers do not have any difficulty putting health messages into practice.</p> <p>We know when mothers change their behavior through home visits, information in registers, surveys, and changes in the demand for services.</p> | <p>Mothers have difficulties understanding messages in Spanish.</p> <p>Mothers forget messages that are not repeated. In addition, some messages are rejected because they are in conflict with the Aymaran way of thinking.</p> <p>The quality of data in registers varies, and data are not complete.</p> |
| Recommendations | |
| <p>Health education should be given more frequently, in an integrated manner, taking into account the Aymaran way of thinking.</p> <p>Improve data in registers.</p> <p>Conduct an analysis of the value of matchboxes with health messages and decide whether to continue with this activity or not.</p> | |

Lessons learned developed in the La Paz evaluation workshop include:

- *It is important that staff speak the local language. Staff need to analyze and reflect whether or not mothers understand and accept health messages.*
- *Staff should develop messages together in a participatory fashion by studying previous experiences.*
- *There is good coordination and communication between the district and local authorities and with other sections.*
- *In order to change behavior, staff must begin with themselves and later look toward others.*

(3) Capacity Building Approach

The National Director of CSRA describes his staff as "expert managers of health systems." The focus is upon managing municipal health systems and working with officials of municipal governments to assist them in becoming better informed policy makers and contractors of health services. At the same time, intense training is given to health care workers, especially at the auxiliary nurse level, to improve the quality of services. There is little distinction within the project among CSRA employees, MOH employees, and municipal government employees. All are part of the same health system management team.

The capacity building approach outlined in the DIP has not changed substantially, although the political context of the approach has changed. CSRA has had an agreement in place with the Bolivian MOH at the national level since 1983 along with agreements at the regional level and with each of three municipalities in the project area. The three separate municipal agreements were renewed at the end of 1998 for a three- to five-year period. These agreements make CSRA responsible for management of the health systems in each municipality, including provision of all health services, and accountable to both the municipal governments and regional health authorities. Municipal governments agree to spend at least 10 percent of their respective budgets on health services, and the regional MOH (SEDES) agrees to increase its contribution over the project period. Decision-making is shared.

The 1998 municipal agreements were developed and signed after the Law of Popular Participation was enacted in 1994. The law provides for decentralizing decision making for health systems with local municipal health boards taking a more active role and fewer decisions being made at the regional level, according to the concept of shared management ("Gestion Compartida").

More recently, the government has been proposing concurrent management ("Co-Gestion") that again gives more power to the regional MOH relative to the local municipal health boards. Although the political context has changed, in practice, the new policy of concurrent management has not been implemented, and local health boards are functioning with increased authority as described in the DIP. New municipal elections were held on December 5, 1999, during this evaluation. In February 2000, new municipal budgets will be developed with the newly elected officials in place. At that time, more changes in the political context of health services delivery are expected, but no one can predict the direction these changes will take.

Overall strengths and weaknesses with regard to capacity building, along with recommendations, were developed in the evaluation workshops, as follows:

| Strengths/Opportunities | Weaknesses/Threats |
|--|--|
| <p>Personnel are trained according to their needs.</p> <p>CSRA has strengthened infrastructure (construction, equipment, repairs to health facilities) and purchased vehicles.</p> <p>Courses have been given to government authorities about the law of popular participation and Basic Health Insurance.</p> <p>CSRA has increased the managerial and administrative staff in each municipality.</p> | <p>Follow-up is necessary for training in leadership, teamwork, and other areas of human resources.</p> <p>Personnel don't always have a good attitude toward clients.</p> <p>The cold chain is weak in some places, such as in Wilacunca.</p> <p>There is no ambulance in Ambana for emergencies, educational activities, follow-up for patients, supervision, etc.</p> |
| Recommendations | |
| <p>The manager of Human Resources should have regular follow-up of courses to strengthen both staff and counterparts. Courses in teamwork should be conducted in every municipality, with follow-up.</p> <p>The need for an ambulance in Ambana should be justified.</p> <p>Cold chain equipment should be prioritized in budgets.</p> <p>Sterilization equipment is needed for health care facilities in Ambana.</p> <p>We should try to increase the proportion of the budget which HAM (Honorable Alcaldia Municipal) allocates for health services.</p> <p>We should try to improve the attitudes of health care workers toward clients.</p> <p>We should explore activities to strengthen and help district health teams.</p> <p>Better communication and coordination with SEDES is needed at all levels, beginning in the district.</p> | |

Lessons learned are:

- *Training in human development has not had the expected results for lack of follow-up.*
- *Improving relations with SEDES should begin with strengthening relations within the district.*
- *Municipal governments should not be seen only as a source of funds but as full partners.*

(a) Strengthening the PVO Organization

There are no specific objectives or indicators of increased capacity within CSRA. The courses being developed and taught in areas of human resources, however, could certainly be used as one such indicator. All employees, both at the La Paz headquarters and in the municipalities, have received training in leadership within the past two years, along with local partners (Section B.3.b), and training in teamwork is planned. (See Section 3.B. for a discussion of training in technical areas.)

At the U.S. headquarters, several activities have been undertaken to strengthen the CSRA Board of Directors. During October 1998, the ARHC and CSRA boards signed a document outlining measurable goals and objectives for the evolving relationship between them. In July 1999, a representative from the ARHC Board traveled to all the Bolivian program sites and met with the CSRA Board to establish an ongoing dialogue. In November 1999, representatives from both boards held a joint meeting to continue discussing specific ways to strengthen the CSRA Board. These discussions have been useful for both boards. During January 2000, there are plans for a U.S. consultant to spend about three weeks in Bolivia preparing a detailed analysis of the CSRA La Paz office staff functions and making recommendations for restructuring. This consultancy will be funded by a sub-grant received from CARE.

The rapid increase in vaccination coverage, and improvements in many other areas, is certainly an indication that organizational capacity has been increased. The commitment, hard work, interest, and strong management, which are apparent in the field, are other indications.

(b) Strengthening Local Partner Organizations

CSRA works hand-in-hand with public sector partners, especially with municipal and regional authorities. The roles and responsibilities of these principle partners, discussed in Section 3.D. and in Attachment 7, have not changed since the DIP.

A factor, which the CSRA Executive Director has identified as contributing to capacity building with municipal partners, is the way in which municipalities are selected to work with CSRA. Authorities from Puerto Acosta approached CSRA and asked for its help. Municipal authorities in Puerto Acosta, therefore, are highly motivated to honor their commitments and to work closely with CSRA in building capacity and improving health care services and related infrastructure. Similarly, Carabuco authorities value the work of CSRA, recognize its credibility in the communities, and see CSRA officials as a part of local civil society. Ancoraimes, on the other hand, has a much lower level of commitment and has not been honoring its financial commitments. It remains to be seen what changes will occur after the December 5th elections with regard to the commitment of the new authorities and their working relationship with CSRA.

One of the greatest challenges this project faces in effective management of health services is to increase the capacity of public sector partners and CSRA staff to function as a team. The Manager of Human Services has begun testing training materials to improve teamwork and plans to train staff and public sector partners at all levels during the next two years. Leadership training has been given to all public sector local partners, as discussed previously.

Some public-sector staff receive salary supplements from CSRA (Section 3.D.). Staff who receive salaries from both public sector institutions and CSRA are especially at risk of having conflicting priorities. A good example occurred during the present evaluation. Regional MOH staff (SEDES) were issued a letter suspending routine project activities, including the evaluation, until after the month-long vaccination campaign ended in late December. The following day, the letter was rescinded and authorities agreed to the project evaluation following negotiations with the CSRA National Director. Before salary supplements were offered to some MOH and municipal staff, a careful assessment was made of the duties public sector health care workers were performing, what needed to be done to reduce morbidity and mortality in the area, and what additional duties health care workers needed to perform. Supplements were seen as necessary to motivate staff to perform additional duties.

The organizational capacity of public sector institutions to deliver basic health care is assessed on an on-going basis, but especially during the Annual Evaluations. As is the case with CSRA, the best measure of increased capacity is the increased health care coverage and improved services (Section A).

CSRA continues to work with non-governmental organizations (NGOs), as described in the DIP. The only major new initiative has been a proposal just developed jointly with Freedom from Hunger/Creceer for a possible USAID mission-funded matching grant. Under this proposal, CSRA will provide health services in selected communities throughout the project area; and Freedom from Hunger/Creceer would provide health education and micro-credit services.

A representative from PLAN International participated in the evaluation in Ancoraimes, and some new joint initiatives may be implemented in communities where PLAN has sponsored children. Specifically, PLAN is interested in providing funding to strengthen health services in its project communities. This strengthened partnership is only in the discussion phase.

(c) Health Facilities Strengthening

Health facilities have been strengthened in a number of ways, including improved infrastructure, an improved information system, and better-trained staff. (See sections 3G and 3B for a discussion of improvements in the information system and in training.)

During the past two years, ARHC and the municipalities have financed improvements in health facility infrastructure. From the beginning of the project in 1997 to present, ARHC has provided U.S. \$21,228 of the total \$64,159 that has been spent on infrastructure improvements. The municipalities financed the remainder. ARHC's contributions have included:

- Meeting rooms and staff housing in Carabuco;
- A new medical center in Chaguaya/Carabuco (56% ARHC financing);
- Staff housing in Ambana;
- A new medical center in Copusquia/Ambana (58% ARHC financing); and,
- A new health post in Pocoata/Ancoraimes (42% ARHC financing).

Work teams arranged by ARHC have also contributed building materials and other supplies and equipment as well as participating in construction projects. There have been three teams working in the project area since it began in October 1997.

(d) **Strengthening Health Worker Performance and Training**

See Sections 3.B and 3.C.

(4) **Sustainability Strategy**

The CSRA Executive Director considers "long-term, non-profit, professional management leadership as a part of our sustainability strategy." CSRA's leadership has built financial sustainability into the project by developing contracts with both municipal and regional authorities to financially support the health care system (Section B.3) and by cost recovery through fees for service for some services, most notably dental services.

The table below shows the sustainability indicators identified in the DIP along with end-of-project goals and achievements:

| Indicator | Baseline | End-of-Project Goal | Achievement at 2/99 |
|--|----------|---------------------|--------------------------------------|
| Increased Local (Municipal) Support of Recurring Costs | 18% | 50% | 26% |
| Increased Overall Bolivia-Funded (Government) Support | 34% | 67% | 44% |
| Increased Municipal Support | 3% | 20% | 20% |
| Increased Regional Support | | Plus 15% | Plus 32% from 3/97-2/98 to 3/98-2/99 |
| Increased Sales | | Plus 25% | Plus 31% from 3/97-2/98 to 3/98-2/99 |

Notes: More detailed spreadsheets, with graphs, on sources of income by year are contained in Attachment 6.

CSRA maintains financial information on the fiscal year from March through February. Thus, financial data in the table above begins in March 1997 rather than the start date of the grant on October 1, 1997.

As shown in the table above, the project has made progress in each sustainability indicator

and has already achieved three of the five end-of-project goals. Municipal support has increased by 20 percent and regional MOH support by 32 percent in just a one-year period. Sales (service fees) have been increased by 31 percent. Overall government support has been increased from 34 percent to 44 percent and increased local support of recurrent costs from 18 to 26 percent. Although CSRA has not yet reached the desired goal with respect to these two indicators, there is potential for doing so in the remaining two years of the project.

Early this year, CSRA management intends to begin to discuss and prepare a plan to transfer full management of health services to the municipality in Carabuco by the end of the project. CSRA expects to continue to offer its services in this municipality, after the end of the project, only if the government and CSRA can fund a package of services without external donor support. Government officials interviewed said that the same quality of care cannot be maintained without external donor support and that they would seek other sources of external funding, perhaps through another NGO, should CSRA not continue partial funding of services.

CSRA's present sustainability strategy considers the following five elements to be essential in ensuring sustainability during this transitional phase:

- A demand for health services offered by the project;
- An adequate flow of resources;
- An organizational structure which guarantees accountability, leadership, continuity, and worker satisfaction;
- A sense of ownership; and,
- Adequate technology.

In May 1999, legislation was passed for Basic Health Insurance (Seguro Basico de Salud). This legislation stipulates that pregnant women and children receive care free of charge in government facilities. Given this new legislation, CSRA has not pursued its plan to work with Lassen Associates and Population Services International (PSI), as described in the DIP, in order to optimize service fees. Service fees are being charged for some services, such as dental services. CSRA receives reimbursement from the "Seguro Basico de Salud" for the volume of services delivered monthly, by type. These reimbursements are a portion of the government contributions toward health care financing in the area.

Aside from financial sustainability, motivating health promoters is also important to sustaining work in the communities. Promoters in some municipalities are paid a small honorarium of 20 bolivianos (Bs) a month (U.S. \$3.35). The amount of monthly payment is based upon a system of micro-payments of Bs .50 to 1.50 for tasks completed. Other incentives for promoters include payment of materials for promoters who choose to study to become an auxiliary nurse. Some promoters have hopes that the municipality may add a salary for their work at some future date. Promoters interviewed during the evaluation frequently mentioned their desire for financial incentives. Members of the evaluation team recommend that CSRA consider the total benefits package along with the role of promoters as a priority in early 1999.

Staff identified the following strengths, weaknesses, and recommendations with regard to implementation of the current sustainability plan during evaluation workshops:

| Strengths | Weaknesses |
|---|---|
| Costs are recovered for some medical services. | There is a delay in payments from HAM and the Seguro Basico de Salud. |
| There are promotores working in every community as volunteers. | Promoters want incentives, especially in Ambana. |
| Investments from HAM are 10-15 percent of its budget in the respective municipalities. | |
| Drugs are being sold. | |
| Recommendations | |
| Consider the total benefits package along with the role of promoters as a priority in the beginning of the year. Try to increase community support for promoters. | |
| Consider Co-Management and other options on the basis of costs and benefits. | |
| Increase investments from HAM (the municipality) and the ministry. | |

Lessons learned identified by workshop participants include:

- *Staff are not very clear about what they want with regard to working with promoters, much less about how to do it.*
- *Co-management (municipalities-SEDES) has a high cost. Staff should try to measure costs and benefits. [See "Gestion Compartida," Section 2.B(3).]*
- *Staff should carefully systematize and document the experience with Co-Management ["Gestion Compartida," see Section 2.B(3)] in order to understand and share it.*
- *Staff should continue efforts to help partners see the benefits of the census-based methodology and the institutional strategy of sustainability.*

3. Program Management

A. Planning

CSRA has involved all members of the health services delivery team, its governmental partners, and selected community members in both planning and evaluation. Members of other NGOs are also invited to participate, although some do not take advantage of the opportunity. During the evaluation, CSRA invited all NGOs with activities in the project area to participate.

Only PLAN International, Intervida, and International Eye Care sent representatives who attended some part of the evaluation upon which the next year's workplan will be based.

Technical and administrative staff in La Paz had copies of the program objectives, indicators, and monitoring and evaluation plans readily available and understood them. Government officials interviewed also had copies of the Annual Plans and understood the program design.

Program monitoring data were discussed extensively during the mid-term and annual evaluations with a view toward developing next year's Annual Work Plan. These data are also reviewed periodically throughout the year and used for making implementation decisions.

The work plan submitted in the DIP is on schedule, although the plan is really too general for program implementation. CSRA develops more detailed work plans annually. Deviations from the work plan in the DIP include:

- Technical assistance, both local and external, has not been utilized to the extent scheduled; but staff have identified areas where technical assistance can be used during the coming two years of the project (Section 3.H); and,
- The sustainability studies in the work plan have not been done. The Executive Director identifies the studies as a need but feels that staff do not have the time without technical assistance.

Evaluation workshop participants identified strengths and weaknesses with regard to planning, along with recommendations, as follows:

| Strengths/Opportunities | Weaknesses/Threats |
|--|---|
| Representatives of SEDES and HAM are involved in evaluations and annual planning. Representatives know the goals, objectives, and activities of the project. There are meetings every 1-3 months. | The project is not as integrated as we would like with other sectors, e.g. income generation and education. |
| Recommendations | |
| Representatives of other sectors for example, community leaders, members of religious groups, representatives of agricultural organizations, and the District Director of education should be incorporated more effectively into annual planning. Strengthen intersectorial coordination. | |

A lesson learned is:

- *Staff should continue exploring other strategies for more active participation of government authorities and organizations working in non-health related sectors, in planning and evaluation not necessarily through internal planning and technical evaluation workshops.*

B. Staff Training

Oversight of staff training is divided among the manager of Human Resources, the project director, and project managers in each of the municipalities. The Manager of Human Resources conducts training sessions to develop skills in leadership and teamwork to deliver quality services, and the project director and managers are in charge of training and training coordination in technical areas.

CSRA feels that training in leadership and teamwork is especially important for three reasons:

- Members of the Local Health Boards can benefit from this type of training to take a more active role in managing their local health care system;
- Staff of the Regional MOH, the Local Health Boards, and CSRA manage the health care system in each of the three municipalities. The management approaches of these three entities vary tremendously. Training in teamwork helps these staff to function together as one health care management team; and,
- Staff members have an opportunity to share experiences during training.

Since the beginning of the project, all staff, from the executive director to auxiliary nurses, and including government counterparts providing health care in the three project municipalities and La Paz administrative staff have received leadership training – a total of 95 people. Members of Local Health Boards of each municipality also received this training. Five La Paz staff members have participated in a pilot test of materials developed for training in teamwork. During the remainder of the project, the manager of Human Resources plans to train staff and government counterparts. (See also Section 3.D.)

Training in leadership or teamwork has not been given to volunteer promoters mainly because appropriate materials have not been developed in the local language.

In technical skill areas, members of the evaluation team found that staff are well trained through the auxiliary nurse level, with the exception of medical interns. Members of the evaluation team felt that skills and knowledge are not being sufficiently monitored after training, however. More follow-up and repetition in training is needed at all levels. An important step toward more effective monitoring of training results was taken with the introduction of quality checklists in August 1999. The information being collected in the quality checklists, however, is not being analyzed to identify training gaps.

**Health Personnel Trained by Course
CSRA Altiplano Project Area
1999**

| Municipality | Topics | | |
|-----------------|--|--------------------------------------|---------------------------|
| | Integrated Mgmt. of Childhood Illness | Sexual and Reproductive Health | Integrated Health Care |
| Puerto Acosta | 8 | 10 | 4 |
| Carabuco/Ambaná | 6 | 6 | 1 |
| Ancoraimes | 11 | 2 | 1 |
| La Paz | 3 | - | 3 |
| TOTAL | 28 | 18 | 9 |

Notes: The Integrated Management of Childhood Illness (IMCI) training course includes 88 hours of instruction for auxiliary nurses and 48 hours of instruction for other health care staff.

Training in sexual and reproductive health includes 40 hours of hands-on instructions within the hospital for auxiliary nurses.

Integrated health care is an 11-day intensive course.

Training topics, especially important for the child survival and maternal health project, included:

**Training Topics for Health Personnel
CSRA Altiplano Project Area - 1999**

| Topics | Municipalities | | | |
|----------------------------------|----------------|----------|--------|------------|
| | Puerto Acosta | Carabuco | Ambaná | Ancoraimes |
| Cultural understanding | X | X | X | X |
| Verifying Supervisory Checklists | X | X | X | X |
| Leadership | X | X | X | X |
| Com. census methods | X | X | X | X |
| Mortality analysis | X | X | | X |
| Nutritional counselling | X | X | X | X |
| Follow-up | X | X | X | X |
| Basic health insurance | X | X | X | X |
| Community communication | X | X | X | X |
| Family planning | | | | X |

Some promoters interviewed were well trained, and others had information gaps, especially with regard to pneumonia and family planning. Some promoters did not have educational materials. More training of promoters was identified as a need during the next two years of the project. The number of promoters receiving training in 1998 and 1999 are as follows:

**Promoters Trained by Municipality
CSRA Altiplano Project Area - 1998 and 1999**

| Municipality | 1998 | 1999 |
|---------------|-----------|-----------|
| Carabuco | 13 | 12 |
| Ambaná | - | 13 |
| Puerto Acosta | 15 | 30 |
| Ancoraimes | 11 | 20 |
| TOTAL | 37 | 75 |

Topics in which the volunteer promoters were trained in 1999 include:

Training Topics for Promoters
CSRA Altiplano Project Area - 1999

| Topics | Municipality | | | |
|--------------------------------|--------------|----------|--------|------------|
| | PuertoAcosta | Carabuco | Ambana | Ancoraimes |
| Diarrheal disease/cholera | X | X | X | X |
| ARI | X | X | X | |
| Primary eye care | | X | X | |
| Nutritional counselling/anemia | X | X | X | X |
| Malnutrition | X | X | X | X |
| EPI | X | X | X | |
| Tuberculosis | X | X | X | |
| Nutrition | X | X | X | X |
| Home Visits | X | X | X | |
| Sarcoptosis | | X | X | X |
| Parasites | | X | X | |
| Family Planning | X | X | X | |
| First Aid | | X | X | |
| IMCI | X | X | X | |
| Breastfeeding | X | X | X | |
| Maternal Health | | | | X |
| Census | | | | X |
| Basic sanitation | | | | X |
| Dog vaccination | | | | X |
| Traditional medicine | | | | X |

Training which has been conducted during the past two years includes a 1997 session for third graders at a primary school in the project area and for 25 third and fourth graders at Martin Cardanes School in Chaguaya in 1999.

Participants in evaluation workshops identified the following strengths and weaknesses, along with recommendations:

| Strengths/Opportunities | Weaknesses/Threats |
|--|---|
| <p>Personnel are trained according to their needs.</p> <p>Training in self-esteem and leadership as well as in technical areas is given to health care teams and some leaders and promoters in Ancoraimes.</p> <p>All the auxiliary nurses value the flipcharts used for training.</p> <p>Since August, quality checklists have been used.</p> | <p>Only repetition of courses is not sufficient. Follow-up is difficult but essential.</p> <p>Some promoters do not have educational materials (flipcharts).</p> <p>As a matter of policy, SEDES does not train medical interns.</p> <p>Messages on matchboxes are not complete and do not awaken interest in the families.</p> <p>Information in quality checklists is not being analyzed.</p> <p>There is a lack of training in how to maintain motorcycles.</p> <p>The variety of educational materials for use in the community is not sufficient.</p> <p>There is no training plan in human resource subjects.</p> |

Recommendations

Conduct more courses in leadership and teamwork.

Personnel at all levels need more repetition in training.

Train medical interns intensively for at least three months and on an on-going basis within the health team.

Train more school students, especially in family planning.

Give more training to auxiliary nurses and promoters in ARIs, especially in pneumonia.

Use more videos for training health personnel.

Train all active promoters in the use of flipcharts.

As previously evaluated, flipchart materials should also be developed in a rotafolio format.

Use the quality checklists to conduct follow-up and in order to find out technical areas where training is needed.

New auxiliary nurses need more training and experience in the general health of women.

Selected training topics should take into account the weaknesses and need of members of the health care team and administrative staff.

Investigate the possibility of contracting a mechanic(s) to rotate among the sites to maintain both vehicles and motorcycles.

Develop a plan for training in human resource subjects, with priorities noted.

Offer more practice in clinics for members of the medical team at all levels.

Lessons learned developed in the La Paz workshop include:

- *Follow-up to training is important to increase its effectiveness.*
- *In addition to training in technical areas, staff training in self-esteem, self-confidence, gender, self-management, principles, and values all increase the quality of health care services.*
- *Health education contents must be adapted to Aymara cultural understandings, and health education should be given in Aymara.*
- *There is a need to constantly reinforce educational messages, particularly for mothers and*

promoters, according to their educational needs, in order to achieve the changes in attitude that we desire.

- *Training needs assessment must be done in order to design a training program with good technical content, educational techniques, and follow-up.*

C. Supervision of Program Staff

The word "supervision" has a bad connotation throughout the project area. Instead, staff refer to "accompaniment" which means that the "supervisor" accompanies the person he/she is "supervising" in carrying out activities, assists in order to provide a model, and makes helpful suggestions. Accompaniment is done in a non-hierarchical fashion emphasizing that the two ("supervisor" and "supervisee") are peers with different knowledge.

Clinic staff are well supervised, as are auxiliary nurses. Auxiliary nurses spend mornings visiting communities and families, usually house-to-house, and afternoons at health posts, clinics, or hospitals. Those attached to clinics and hospitals have ample opportunity to discuss difficult cases with other technical staff and to problem solve.

Promoters are not as well supervised. The frequency of their contact with auxiliary nurses varies considerably among municipalities and depends somewhat on the distance of their community from a health facility where auxiliary nurses are based. Some promoters complain that their only contact is when they go to a health facility to seek assistance for a patient. Although in theory, there is a monthly meeting with an auxiliary nurse in each municipality at which promoters turn in a monthly report, promoters do not always come to this meeting. In Carabuco, where the project has been working for about 16 years, most of the 17 active health promoters come to this meeting. In Ambana, where CSRA has been working for two years and communities are more disperse, only one to three of the 16 active promoters regularly turns in a report at the monthly meeting.

Although substantial resources are devoted to staff training, follow-up in the field to assess trainee performance is not adequate. Checklists were implemented in August with mixed results. Some "supervisors" find them to be useful while others see them as hierarchical and not consistent with the concept of accompaniment as a peer. Whether supervisors see the checklists as useful or not, however, staff throughout the project area agree that more needs to be done with the information provided by the checklists. For instance, the checklists could provide a type of needs assessment for refresher training (Section 3.C). Follow-up in the field can be more closely monitored now that checklists are being used.

The following strengths, weaknesses, and recommendations were identified during the final evaluation workshop in La Paz with regard to accompaniment:

| Strengths/Opportunities | Weaknesses/Threats |
|--|---|
| <p>Quality checklists have been used since August.</p> <p>There is frequent contact among doctors, medical interns; and other members of the paid health team with good communication.</p> <p>Self-management and self-evaluation are very important.</p> | <p>It is possible to use the information collected in the quality checklists much more.</p> <p>Some of the auxiliaries help promoters only when there is a sick person in the community.</p> <p>More help and support are needed for staff.</p> |
| Recommendations | |
| <p>Analyze quality checklists on an on-going basis. Quality checklists can be used to look for areas where more training is needed.</p> <p>Adapt the quality checklists for the promoter. The checklists are now directed toward the work of the auxiliary nurse.</p> <p>Promoters need regular help from auxiliary nurses with more time dedicated to personalized, on-the-job training.</p> <p>There should be accompaniment, according to experience and abilities, among the different levels.</p> <p>Training and accompaniment of new staff, especially medical interns, should be intensified and frequent, especially during the first six months of employment.</p> | |

Lessons learned include:

- *An introductory workshop for new personnel is necessary because it permits new staff to get to know the type of institution in which they work, the other persons who work in the institution, and the objectives and institutional philosophy.*
- *Accompaniment is more effective (at all levels) when it empowers, is personalized, is oriented toward an exchange of experiences, and involves working together in a way which promotes the integral development of the person.*
- *The quality checklist is a valid instrument for accompaniment of members of the health team. Nonetheless, constant follow-up is needed in using the instrument. It should be adapted to be more acceptable to personnel and used at all levels, including with leaders/promoters.*

D. Human Resources and Staff Management

CSRA, working together with personnel from the Regional MOH and the municipalities, manage the municipal health systems. The CSRA National Director has set a policy that the base salaries of its staff be kept at the same level as MOH and municipality health care staff. CSRA contributes to the salaries of several MOH and municipal employees, including doctors serving a one-year rural internship, auxiliary nurses, and dentists. These employees are paid extra for adding to their usual workload tasks requested by CSRA which are outside the normal job description of a government employee in their position. For example, auxiliary nurses who remain with health facilities waiting for patients to come and make some home visits are paid their usual government salary. Auxiliary nurses who have agreed to be responsible for a sector ("Responsible del Sector"), that includes vital events registration and more home visits, are paid an additional supplement. According to the Director of Finance and Administration, the CSRA supplement increases the salary of interns by about 15 percent, dentists by 15 percent, and auxiliary nurses by 40 to 50 percent.

A big human resource challenge, described in Sections 2.B.(3), has been to mold staff from CSRA and public sector partners into one coherent working team with shared visions and goals and a shared institutional culture. CSRA would like to institutionalize a culture in which employees are relatively self-directed and task-oriented rather than seeking a top-down, directive management approach.

Another challenge is to change attitudes of staff toward the clients. Many staff, such as doctors completing their one-year internship, have a short-term commitment to the community and set themselves apart from the community. According to the CSRA Executive Director, the attitude that service providers are somewhat apart from the communities they serve extends all the way to volunteer promoters.

The CSRA Executive Director has noted a deficiency of personnel in two areas: front-line health care workers and staff to maintain the information system and analyze data. When CSRA began services in Carabuco, there was one paid health care worker for every 1,000-1,200 population. According to the Executive Director, this ratio has now increased to one paid worker for each 1,500 population. At the same time, the relative risk of health problems for community members has increased due to the out-migration of the fittest members of the community. In Ancoraimes, there is one paid health care worker for each 2,000 population. CSRA would like to maintain the ratio of paid health care workers to at least one per 1,500 inhabitants.

Although a great deal of quality information is being collected on the project, potentially useful information is not being used because of the lack of staff to review and analyze data. A good example is the lack of systematic review of data being collected in quality checklists used for supervision.

There are job descriptions for almost all staff, but some have not been updated in the last five years and are seen by some staff to be out-of-date, although the Manager of Human Resources thinks that the older job descriptions still apply. Senior staff are least likely to have a written job description. A lack of written personnel policies has been identified as a weakness for

which technical assistance is needed to correct (Section 3.H.).

Staff turnover is generally not an issue on the project. Most staff have been with the project for years, including auxiliary nurses and many promoters.

The numbers, roles, and responsibilities of program and administrative staff are detailed in Attachment 7.

After the project ends, most staff will continue to be employed by the municipality or the MOH. Occasionally, a promoter studies to become an auxiliary nurse. CSRA assists them by paying for educational materials needed for training.

Workshop participants identified strengths and weaknesses and recommended changes as follows:

| Strengths/Opportunities | Weaknesses/Threats |
|---|---|
| All personnel in the network of services work together, including CSRA, HAM, and ministry staff. Most staff members in CSRA have written job descriptions, although the descriptions are not always up-to-date in the La Paz Office. | Everyone doesn't always work as a member of a team. |
| Recommendations | |
| Training and follow-up is needed in teamwork as well as in other areas of human resources. (The Manager of Human Resources already has developed a draft of materials for a course in teamwork.) More coordination is needed among administrative staff at all levels and locations, both with CSRA and with counterparts. Development, training, and follow-up are needed in the "institutional culture." Give auxiliary nurses opportunities for promotion. Bring up-to-date job descriptions for personnel in the La Paz Office. | |

Lessons learned include:

- *Follow-up to training should be incorporated into daily activities.*
- *Strategies are needed to improve coordination with SEDES at the local level.*
- *Strategies are needed which permit major participation from all persons involved in developing policies and institutional norms.*

E. Financial and Administrative Management

The table below shows the percentage of the budget spent in the first two years of the project by major line item. Total spending is on target at 51 percent of the budget after two of four project years, although there is some overspending for communications and procurement.

Spenddown by Major Budget Line Item
ARHC/CSRA Child Survival and Maternal Health Project
October 1, 1997, through September 30, 1999

| Item | Expenses | | | Budget | | | % Budget |
|-----------------|----------|---------|-----------|-----------|-----------|-----------|----------|
| | USAID | Match | Total | USAID | Match | Total | Spent |
| Salaries | 453,010 | 162,942 | 615,952 | 767,000 | 635,262 | 1,402,262 | 43.93% |
| Consultants | 12,836 | 5,505 | 18,341 | 47,200 | 256,886 | 304,086 | 6.03% |
| Travel/Per Diem | 14,756 | 39,847 | 54,603 | 111,460 | 4,720 | 116,180 | 47.00% |
| Communications | 24,525 | 106,687 | 131,212 | 64,900 | 0 | 64,900 | 202.18% |
| Procurement | 39,485 | 155,872 | 195,357 | 9,440 | 103,132 | 112,572 | 173.54% |
| Evaluation | 9,620 | 643 | 10,263 | 0 | 0 | 0 | - |
| Total | 554,231 | 471,497 | 1,025,728 | 1,000,000 | 1,000,000 | 2,000,000 | 51.29% |

The Manager of Administration and Finance in La Paz feels that administration would be strengthened if more policies and norms were written.

The Executive Director has expressed a strong interest in examining the costs of specific interventions and linking results with costs, but he feels that he lacks the in-house capacity to proceed with this exercise and would like outside technical assistance (Section 3.H.).

Strengths and weaknesses, along with recommendations developed in workshops, include:

| Strengths/Opportunities | Weaknesses/Threats |
|--|--|
| Management of funds. | Many of the policies, norms, and procedures are not written. |
| Recommendation | |
| Develop manuals for policies, norms, and procedures. Investigate the possibility of adapting manuals used on other projects or by other organizations. | |
| Carry out a monthly analysis of program spending in coordination with the La Paz office and other municipal sites. | |
| Implement an inventory system for assessments at all sites. | |

Lessons learned include:

- Training is needed in methods of administration; stock management for medicines and supplies; Law #1178 for managing municipal resources; and in pharmaceuticals, generic and commercial.

- *An effective mechanism is needed to guarantee administrative and financial coordination among the project sites.*

F. Logistics

Technical field staff meet monthly in La Paz, and administrative field staff meet every three months. During this time, they fill out requisitions for pharmaceuticals, vehicle repair, and all other items. Administrative staff have difficulties communicating with field staff regarding the status of procurements between meetings. One of the most important constraints to the efficient functioning of the project, mentioned repeatedly by La Paz administrative staff, is a lack of good communications between the La Paz office staff and field staff. Ancoraimes and Puerto Acosta have telephone connections with La Paz, but Carabuco and Ambana have contact only by radio.

Throughout the workshops in the municipalities, there were frequent complaints that drugs and supplies arrived late and that there were sometimes mistakes. Procurement staff, on the other hand, complained that specifications for supplies were sometimes not detailed enough for them to follow correctly. Other times, items were out-of-stock in La Paz, and they could not communicate this information easily. All staff agree that the procurement and logistics system needs to be strengthened. Senior-level staff have tried to improve the procurement and logistics system, but the system is still not functioning well. Members of the evaluation team feel that technical assistance is needed in this area as soon as possible.

Strengths, weaknesses, and recommendations are as follows:

| Strengths | Weaknesses |
|--|--|
| Staff are committed to improving the logistics system as a priority. | Delays and mistakes in the delivery of medical supplies and drugs. Communication between La Paz and the municipalities is not good. Only two sites have telephones. The other two can be reached only by radio. |
| Recommendations | |
| <p>Improve the procurement and dispatch system for drugs, supplies, and other materials.</p> <p>Hold a meeting immediately between administration and logistics to revise and update norms, rules, and sanctions to improve the procurement system for medical supplies and resolve internal logistical problems.</p> <p>Form a quality circle of the four persons in charge of followup for logistics.</p> <p>Develop and implement Verification Lists for the La Paz office.</p> | |

G. Information Management

The system generates both clinic- and community-based data and consists of MOH data collection forms, supplementary CSRA forms, quality checklists, registers, community censuses, and special studies such as KPC surveys. The collection and reporting of clinic service statistics functions well. Community-based information, however, is "spotty" with registers being well kept in some geographic areas and not in others.

Service statistics are collected in all health care facilities according to formats developed at the national MOH level. A primary use of these statistics is to determine the main causes of death and illness and then focus activities on reducing the number of deaths and preventing and treating illnesses. In addition, CSRA has a format with supplementary information that is similar for each of the three municipalities, but not identical. Auxiliary nurses complete these formats and do some preliminary analysis of the data. Staff finds these instruments to be appropriate and effective in providing technical and management staff with the information they need since any deficiencies in the national format have been eliminated by developing and using the supplemental formats. The Statistical Technician has been working for CSRA for two years but has only very recently been transferred from Puerto Acosta to La Paz. Having a full-time person in La Paz in charge of the information system, therefore, is a new concept for CSRA.

There is a monthly information analysis meeting in each project municipality, similar to a quality assurance meeting, where all project staff analyze monthly data. Project managers, all physicians, are responsible for ensuring that both clinic data and community-based data from registers are compiled for this meeting. There is a quarterly meeting to analyze data with regard to indicators, review progress, and monitor activities. There are also meetings, on an irregular basis, with promoters and public authorities in some areas to disseminate the information about the municipality and its communities.

The community-based information system depends on the auxiliary nurse who works half days (afternoons) in health care facilities and makes home visits during the mornings. He/she also supervises the promoters. Records for home visits are maintained at health care facilities. The nurse gathers the files needed for home visits each morning and returns them in the afternoon. In addition, promoters, in theory, have a monthly meeting at the health care facility each month. In practice, attendance at this meeting varies by community with nearly all active promoters attending in Carabuco each month, and few attending in Ambana where the distances are greater and no financial incentives are paid as they are in Carabuco.

In addition to the routine data collection system, baseline studies were conducted in all municipalities and reported in the DIP. The person in charge of reproductive health has conducted some informal investigations. Some data being collected could yield useful information but is not being analyzed. For instance, Quality Checklists have been used for the last year for supervision visits but these data are not being analyzed to determine additional training which may be needed, especially at the promoter level.

The information system is being used to inform management decision-making. Staff at all levels were able to give examples of how the information is being used: to know which

geographic sectors need to be strengthened and to follow-up on individual cases are frequently mentioned. Information is routinely and frequently shared down to the auxiliary nurse level. Promoters who attend monthly meetings also share information.

There is very limited feedback to the communities, however. This is a weakness in the information system identified in evaluation interviews. There is only one scheduled annual meeting to provide feedback information to the community. Otherwise, community members have access to information that is reported on posters at each clinic. There is no formal system by which staff from the different municipalities can share information and experiences, except for project managers and administrative field staff, who meet monthly and quarterly, respectively, in La Paz. Health care workers from different areas generally have opportunities to share information and experiences only during training events.

The CSRA Executive Director noted a limitation of the Census-Based Approach. The approach focuses upon the most severe, frequent, and treatable health conditions in a community to reduce overall mortality and morbidity. This approach has resulted in concentrating efforts on maternal and child health services. Other serious problems exist in the project area, however, such as alcoholism and mental health problems, which seriously impinge upon the well-being of families but which do not receive attention under the Census-Based Approach.

Participants in the evaluation workshops identified the following strengths and weaknesses of the information system and made recommendations:

| Strengths | Weaknesses |
|---|--|
| A census-based information system produces reliable data. | A census has not been taken in all communities. |
| There is good community participation in census taking. | Analysis of verbal autopsy data is not frequent. |
| Verbal autopsies provide good information about child and maternal deaths. | Many promoters do not fill out their monthly information forms. |
| The majority of clinic data are complete and of high quality. | The quality of data in registers isn't very good in some cases because of changes in instruments. |
| The health care team and government authorities are kept informed about project progress. | Promoters and mothers don't know of the project's progress. |
| | In one sector in Ambana, SEDES personnel do not take an interest in the census-based approach. |
| | Some information collected in an instrument complementary to that of the MOH Subsystem of Information of Health Activities (SNIS) is not being analyzed. |
| | There are too many data collection instruments. |

Recommendations

Continue to conduct censuses in every community willing, as time permits, with staff of the network of health services in coordination with other organizations (e.j. PLAN).

Incorporate within the census-based approach a needs assessment to be carried out jointly by the staff and community.

Analyze and share verbal autopsy data frequently (e.g. monthly).

Review data from registers together with auxiliary nurses.

Investigate non-economic incentives for promoters to increase their motivation to complete their monthly form.

Share data more frequently with the communities.

Develop a management information system.

Consolidate basic registers into fewer instruments, if possible, one.

At the beginning of the year, hold a workshop to unify criteria and instruments as well as the management and follow-up of information, registers, and the frequency of monitoring.

Standardize the registers and instruments unifying criteria throughout the system (SEDES – El Consejo) and reducing the number of registers.

A lesson learned is:

- *Those responsible for each sector should followup to ensure that registers, both SNIS and complementary registers, are filled out more completely to improve the quality of information.*

H. Technical and Administrative Support

ARHC has provided a variety of technical assistance to the project over the past two years. For instance, headquarters staff have facilitated funding for activities in the following areas: nutrition, dental care, water projects, reproductive health, and organizational assessment. Student volunteer MPH candidates, mostly from Emory University, have carried out in-depth mortality and anthropological studies, which have served to improve the child survival/maternal health program.

In February 1999, Tom Davis, ARHC Senior Program Specialist, presented a training workshop on the design and use of Quality Improvement checklists, as outlined in the DIP. This one-day workshop was conducted in La Paz with all the Project Directors and other key staff. The staff then adapted the sample checklists used in the workshop to key child survival

interventions. Staff then designed a workshop for field staff and selected a limited number of checklists that were implemented in August 1999. During the mid-term evaluation, staff determined that more analysis is needed of the completed checklists; checklists are needed for promoters, not just auxiliary nurses; closer follow-up needs to be given in implementing the checklists; and, in some cases, retraining of staff is needed.

In addition, ARHC has an on-going volunteer program, in which groups of volunteers organized as work teams provide limited short-term medical and construction assistance. The support of these volunteers both while in Bolivia and upon returning to the U.S. is integral to the child survival program.

Sara Lewis Espada, the Child Survival Project Manager, spends approximately 25 percent of her time dedicated to the Bolivia project. She traveled to Bolivia five times over the course of the first two years of the project to attend annual and semester evaluations, provided follow-up on the quality improvement checklists, review the Health Information System, and other activities. Communication between CSRA/La Paz and Ms. Espada in North Carolina is frequent and effective. David Shanklin, ARHC Executive Director, also provides on-going support to build CSRA capacity and facilitate CSRA board strengthening.

Anticipated technical assistance needs of the program in the upcoming two years are in the areas of developing educational materials, improving the logistics system, developing manuals for policies and procedures, and perhaps conducting some special studies of demand and other issues. The most urgent need is for a consultant to review the procurement and logistics system and develop and implement an action plan.

Following are the anticipated technical assistance needs of the program during the upcoming two years, as determined by staff in workshops in each municipality as well as in La Paz:

| Strengths/Opportunities | Weaknesses/Threats |
|--|--|
| <p>There are staff dedicated to the development of educational materials.</p> <p>One anthropological study of Aymara understandings of health and health care has just been completed.</p> <p>Staff has more capacity to develop and produce adequate educational materials.</p> | <p>There are delays and mistakes in procurements, and staff are unsure how to restructure the procurement and delivery system to improve it.</p> <p>There are no written manuals for policies, norms, and procedures, and the Director of Finance and Administration requests help in this area.</p> |

Recommendations

Technical assistance is needed:

- To improve the communication strategy as well as the orientation and production of educational materials in each municipality as well as in other sectors in order to change behavior.
- To improve the logistics system.
- To develop manuals for policies, norms, and procedures.
- To aid in understanding the clients better and improving services, e.g. services of an anthropologist or sociologist.
- To conduct a demand study, including what clients see as "quality."

USAID may be able to assist CSRA in identifying external technical assistance, perhaps through centrally-funded projects, in order to improve the logistics system as well as conduct special studies, such as a study of the demand for services or a study of the comparative costs of intervention strategies.

Lessons learned, with regard to technical and administrative support, identified by staff in the Mid-Term Evaluation Workshop in La Paz include:

- *It is necessary to contract with someone who is able to systematize the experiences of CSRA and facilitate the development of instruments and materials in both administrative and technical areas starting with the abilities, knowledge, and experiences of the staff.*
- *It is necessary to contract for assistance in revising job descriptions, the distribution of tasks, norms, and procedures in the La Paz office.*

4. Other Issues Identified by the Team – Use of Health Services

Mothers and promoters were interviewed about the experiences of community members in using health services. Their responses are summarized in the table below:

| Strengths/Opportunities | Weaknesses/Threats |
|---|--|
| <p>The auxiliary nurse generally treats mothers well.</p> <p>The auxiliary nurse provides services when he/she is there.</p> | <p>The auxiliary nurse is not available at his/her post in the mornings because he/she is making home visits.</p> <p>Sometimes the health post is crowded, and only one auxiliary nurse attends the health post.</p> <p>It is difficult to pay for services at referral facilities.</p> <p>Referral facilities don't always attend to patients rapidly.</p> <p>It is difficult to go to referral facilities because of poor communication and lack of transport.</p> |
| Recommendations | |
| <ul style="list-style-type: none"> There should be two auxiliary nurses at a health post so that one is always available for emergencies when the other is away making home visits. Note: This recommendation may not be financially feasible. | |

5. Conclusions and Recommendations

A large number of recommendations were made during the evaluation workshops conducted at each project site as well as in La Paz. Many of these were quite specific and applicable to small geographic areas. While important in developing the work plan, hundreds of individual recommendations are not appropriate for the mid-term evaluation recommendations. The most important of the recommendations, in the opinion of the team leader, are summarized in this section.

Program staff:

1. Immunization coverage is very high in Carabuco/Ambana and Ancoraimes, but the proportion of children fully-covered needs to be increased in Puerto Acosta during the remainder of the project.
2. Growth monitoring has been very successful in terms of initiating early contact with health care providers and promoting regular contact where malnutrition as well as other

problems can be addressed. Growth monitoring should be continued during the next two years of the project.

3. The strategy for improving the nutritional status of malnourished children is not working as well in some areas as others and should be revisited, perhaps using focus group studies to involve the communities in developing an acceptable strategy or identifying barriers to the acceptability of the present strategy.
4. The pneumonia case management strategy is weak. Efforts should be increased to train volunteers and mothers in how to recognize danger signs and when to bring children to a health facility. Communities should be prioritized according to whether there is good detection of pneumonia cases and efforts intensified in those communities with poor detection or child deaths due to pneumonia.
5. Prenatal care and follow-up for pregnant women at-risk needs to be strengthened through such means as monthly reviews of the list of registered pregnant women, increased information sharing between clinics and the community-based program, community censuses, pregnancy testing at health posts, and comprehensive health education from the beginning of pregnancy. Criteria for high-risk should also be reviewed.
6. The information system needs to be modified to report contraceptive acceptance rates.
7. Health education given to school-aged youth should be expanded.
8. Mothers forget messages that are not repeated. More repetition of health messages is needed in the communities.
9. The project needs to clearly determine its strategy for working with volunteer health promoters and develop a consistent policy toward incentives across project areas.
10. Communication needs to be improved, to the extent possible given the conditions, between the La Paz headquarters and the field offices as well as in the field between members of the facility-based health teams and the volunteers and communities.
11. Although program management is strong, especially financial management, written manuals should be developed for policies and procedures.
12. The logistics system is relatively weak, compared to other management systems. External technical assistance is needed to improve this system.
13. The census-based information system has produced reliable data. The project should continue to conduct censuses in willing communities.

USAID/BHR/PVC:

14. USAID should assist CSRA in identifying external technical assistance, perhaps through

centrally-funded projects, in order to improve the logistics system as well as conduct special studies.

Collaborating partners:

15. The CSRA sustainability strategy is being successfully implemented. The strategy of increasing support from the municipalities and the regional MOH should continue while beginning to discuss a transferal plan of the project to the government in Carabuco Municipality early in 2000.
16. The present strategies for capacity building within the public sector have been very successful and should be continued. The planned courses in teamwork should be delivered in the field, with appropriate follow-up, to maintain the momentum of these successful efforts.
17. CSRA should continue to explore areas of collaboration with other NGOs, such as PLAN International in its sponsored communities and with Intervida's school-based program.

Attachment 1
Baseline Information from the DIP

ATTACHMENT 1 - Baseline Information from the DIP

No substantial changes have been made in the following baseline information since approval of the DIP.

A. Field Program Summary

1. Estimated Program Effort and USAID Funding by Intervention

| Intervention | % of Total Effort | USAID Funds in \$ |
|------------------------------|-------------------|-------------------|
| Immunization | 20% | 200,000 |
| Nutrition and Micronutrients | 15% | 150,000 |
| Control of Diarrheal Disease | 15% | 150,000 |
| Pneumonia Case Management | 15% | 150,000 |
| Maternal and Newborn Care | 10% | 100,000 |
| Child Spacing | 10% | 100,000 |
| Basic Curative Services | 10% | 100,000 |
| Program Strengthening | 5% | 50,000 |
| Total | 100% | 1,000,000 |

2. Program Site Population

Infants, Children and Women of Childbearing Age

| | <i>Carabuco and Ambana¹</i> | <i>Ancoraimes²</i> | <i>Puerto Acosta³</i> | <i>Muñecas⁴</i> | <i>Bautista Saavedra⁵</i> | TOTAL |
|---|--|-------------------------------|----------------------------------|----------------------------|--------------------------------------|--------|
| <i>Infants 0-11 months</i> | 285 | 340 | 599 | 314 | 176 | 1,714 |
| <i>Children 12-23 months</i> | 211 | 351 | 1,081 | 476 | 267 | 2,386 |
| <i>Children 24-59 months</i> | 854 | 1,226 | 1,236 | 1,372 | 769 | 5,457 |
| <i>Women of Childbearing Age (15-49 yrs.)</i> | 2,674 | 3,387 | 5,316 | 3,831 | 2,149 | 17,357 |
| <i>Children to 6 yrs.</i> | 410 | 439 | 688 | N/A | N/A | 1,537 |
| TOTAL | 4,434 | 5,743 | 8,920 | 5,993 | 3,361 | 28,451 |

Estimated Annual Live Births

| | <i>Carabuco and Ambana¹</i> | <i>Ancoraimes²</i> | <i>Puerto Acosta³</i> | <i>Muñecas⁴</i> | <i>Bautista Saavedra⁵</i> | TOTAL |
|---|--|-------------------------------|----------------------------------|----------------------------|--------------------------------------|-------|
| <i>Estimated Live Births (yrs. 2,3,4)</i> | 855 | 873 | 2,064 | 942 | 528 | 5,232 |

Sources of population estimates:

¹ January 1998, 27 censused communities in Carabuco and 1992 estimates, 44 non-censused communities in Ambana

² January 1998 estimates for 25 censused communities and 27 non-censused communities

³ 1995 estimates for approximately 104 non-censused communities

⁴ 1992 National Bolivian Census (Census data provide consistent underestimates of rural Bolivian populations)

⁵ 1992 National Bolivian Census (Census data provide consistent underestimates of rural Bolivian populations)

B. Program Goals and Objectives

IMMUNIZATION

Intervention Goal: Maintain and expand immunization activities and coverage for children under two and all pregnant women.

| Objectives by Project Area and Target Population | Indicator Goals | | | | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|---|-----------------|-------------|-------------|-------------|---|--|--|
| Increase % of children with all vaccinations: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Promote importance of vaccinations during education opportunities. 2. Maintain growth/vaccination cards on all eligible children. 3. Track individual vaccination histories and follow up as needed. | 1. Coverage for each separate vaccine and "all vaccines" for children under 15 months, and under 24 months of age. | 1. Annual evaluation (using a random sample) of family health files. 2. Baseline and final KPC surveys. |
| Carabuco: | | | | | | | |
| 12 - 23 months | 90% | 90% | 90% | 90% | | | |
| 12 <= 15 months* | 58% | 63% | 68% | 73% | | | |
| Ambana: | | | | | | | |
| 12 - 23 months | 20% | 30% | 45% | 60% | | | |
| 12 <= 15 months | 5% | 10% | 15% | 33% | | | |
| Ancoraimas: | | | | | | | |
| 12 - 23 months | 65% | 75% | 80% | 85% | | | |
| 12 <= 15 months | 30% | 35% | 40% | 45% | | | |
| Puerto Acosta: | | | | | | | |
| 12 - 23 months | 35% | 45% | 55% | 60% | | | |
| 12 <= 15 months | 5% | 10% | 15% | 20% | | | |
| Maternal TT coverage (at least 2 doses) for all pregnant women: | | | | | 1. Promote importance of vaccinations during education opportunities. 2. Maintain vaccination cards among all eligible pregnant women. 3. Track individual vaccination histories and follow up as needed. | 1. Coverage for all pregnant women with at least 2 doses. | 1. Annual evaluation (using a random sample) of family health files. 2. Baseline and final KPC surveys. |
| Carabuco: | 40% | 45% | 50% | 55% | | | |
| Ambana: | 25% | 30% | 35% | 40% | | | |
| Ancoraimas: | 45% | 50% | 55% | 60% | | | |
| Puerto Acosta: | 15% | 20% | 25% | 30% | | | |

*See Section O. Immunization for rationale of measuring 12 < 15 months.

DIARRHEA CASE MANAGEMENT

Intervention Goal: Increase the proportion of mothers who appropriately identify and treat diarrhea.

| Objectives by Project Area and Target Population | Indicator Goals | | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|--|-----------------|---------------|--|--|---|
| Proportion of mothers who recognize at least one danger sign of dehydration (dry mouth, sunken eyes or fontanel, and decreased urine output): Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Year 1</u> | <u>Year 4</u> | 1. Provide family education during home visits, group education and clinic visits. 2. Supervise field staff and provide appropriate continuing education. | 1. Increased number of cases reported and treated. 2. Increased proportion of mothers/caretakers appropriately treating diarrhea. | 1. Baseline and final KPC surveys. 2. Routine review of supervisory documentation. 3. Annual review of continuing education classes received. |
| Proportion of mothers who: Carabuco: -have heard of ORT -understand use of ORT ¹ -can properly prepare ORT ¹ -used ORT recently ¹ Ambana: -have heard of ORT -understand use of ORT -can properly prepare ORT -used ORT recently Ancoraimes: -have heard of ORT -understand use of ORT -can properly prepare ORT -used ORT recently Puerto Acosta: -have heard of ORT -understand use of ORT -can properly prepare ORT -used ORT recently | <u>Year 1</u> | <u>Year 4</u> | 1. Provide family education during home visits, group education and clinic visits. 2. Supervise field staff and provide appropriate continuing education. | 1. Increased proportion of mothers/caretakers demonstrating appropriate knowledge and practices. | 1. Baseline and final KPC surveys. |
| Proportion of mothers who give equal/more liquids during diarrhea (exclude breastmilk): Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Year 1</u> | <u>Year 4</u> | 1. Provide family education during home visits, group education and clinic visits. 2. Supervise field staff and provide appropriate Continuing education. | 1. Increased proportion of mothers demonstrating appropriate knowledge and practices. | 1. Baseline and final KPC surveys. |

¹ Denominator is mothers who "have heard of ORT"

PNEUMONIA CASE MANAGEMENT

Intervention Goal: Increase maternal knowledge of pneumonia danger signs and appropriate health-seeking behavior, and treat more cases of ALRI.

| Objectives by Project Area and Target Population | Indicator Goals | | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|---|-----------------|---------------|--|--|---|
| Increased maternal awareness of pneumonia danger signs (rapid/difficult breathing and/or chest indrawing): Carabuco: Ambana: Ancoraimines: Puerto Acosta: | <u>Year 1</u> | <u>Year 4</u> | 1. Provide maternal education during home visits, group education and clinic visits. 2. Supervise field staff and provide appropriate Continuing education. | 1. Maternal knowledge and practices. | 1. Baseline and final KPC surveys. 2. Routine review of supervisory documentation. 3. Annual review of continuing education classes received. |
| Increased proportion of mothers who seek care for ALRI symptoms from trained health personnel: Carabuco: Ambana: Ancoraimines: Puerto Acosta: | <u>Year 1</u> | <u>Year 4</u> | 1. Provide maternal education during home visits, group education and clinic visits. 2. Supervise field staff and provide appropriate Continuing education. | 1. Maternal knowledge and practices. 2. Number of ARI cases treated | 1. Baseline and final KPC surveys. 2. Routine review of supervisory documentation. 3. Annual review of Continuing education classes received. |

NUTRITION IMPROVEMENT AND MICRONUTRIENTS

Intervention Goal: Promote optimal nutritional status among infants, children, and women of child-bearing age.

| Objectives by Project Area and Target Population | Indicator Goals | | | | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|--|-----------------|---------------|-------------|-------------|--|--|--|
| Proportion of infants and children receiving appropriate schedule of controls: (0-23 months = 6 times year) Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Maintain schedule of Controls through home visits, group meetings and clinic visits. 2. Supervise field staff. | 1. Coverage of all infants and children under two. | 1. Annual review of family health files. 2. Baseline and final KPC surveys. |
| Proportion of infants receiving first Control before completing first month of life: Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Maintain schedule of controls through home visits, group meetings and clinic visits. 2. Strengthen supervision of field staff. | 1. Coverage of all infants born who received first control by first month. | 1. Annual review of family health files. 2. Baseline and final KPC surveys. |
| Increase proportion of infants and children with control card in home and/or clinic: Carabuco: Ambana: Ancoraimes: Puerto Acosta ¹ | <u>Year 1</u> | <u>Year 4</u> | | | 1. Maintain schedule of controls through home visits, group meetings and clinic visits. 2. Supervise field staff. | 1. Coverage of all infants and children < 2 yrs. | 1. Baseline and final KPC surveys. |
| Provide intensive nutrition education and follow up to mothers/caretakers with children under two with moderate and severe malnutrition: Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Track malnourished children and follow local policies and protocols for rehabilitation. 2. Supervise field staff. | 1. Total number and proportion of children malnourished. 2. Proportion of malnourished children enrolled in rehabilitation. 3. Duration of rehabilitation and proportion of successful outcomes. | 1. Annual reviews of nutrition rehabilitation records. 2. Baseline and final KPC surveys. |

¹ Baseline reports only cards at home and not the health center.

NUTRITION IMPROVEMENT AND MICRONUTRIENTS (continued)

Intervention Goal: Promote optimal nutritional status among infants, children, and women of child-bearing age.

| Objectives by Project Area and Target Population | Indicator Goals | | | | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|---|-----------------|-------------|---------------|-------------|--|---|---|
| Increase proportion of malnourished children under two enrolled in "Hearth" nutrition rehabilitation sessions: Carabuco: Ambana: Ancoraimas: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Maintain protocol for appropriate schedule of controls. 2. Maintain protocol for nutrition rehabilitation. 3. Supervise field staff and provide appropriate continuing education. | 1. Coverage rates, by age. 2. Proportion of cases of malnutrition treated. 3. Number of supervisory visits and continuing education classes received. | 1. Annual review of nutrition control and nutrition rehabilitation data. 2. Annual review of supervisory records. 3. Annual review of continuing education classes. 4. Baseline and final KPC surveys. |
| For malnourished children receiving "Hearth" nutrition rehabilitation sessions, measure % of children with an increase in weight for age Z score of 0.3 or larger: Carabuco: Ambana: Ancoraimas: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Maintain protocol for appropriate schedule of controls. 2. Maintain protocol for nutrition rehabilitation. 3. Supervise field staff and provide appropriate continuing education. | 1. Coverage rates, by age. 2. Proportion of cases of malnutrition treated. 3. Number of supervisory visits and continuing education classes received. | 1. Annual review of nutrition control and nutrition rehabilitation data. 2. Annual review of supervisory records. 3. Annual review of continuing education classes. 4. Baseline and final KPC surveys. |
| Increase exclusive breast-feeding of infants through first six months of life: Carabuco: Ambana: Ancoraimas: Puerto Acosta: | <u>Year 1</u> | | <u>Year 4</u> | | 1. Provide family education during home visits, group education and clinic visits. 2. Supervise field staff and provide appropriate continuing education. | 1. Increased proportion of mothers demonstrating appropriate knowledge and practices. 2. Number of supervisory visits and continuing education classes received. | 1. Baseline and final KPC surveys. |
| Increase proportion of children beginning solid foods 6-10 months: ¹ Carabuco: Ambana: Ancoraimas: Puerto Acosta: (6-9 mos.) | <u>Year 1</u> | | <u>Year 4</u> | | 1. Provide family education during home visits, group education and clinic visits. 2. Supervise field staff and provide appropriate continuing education. | 1. Increased proportion of mothers demonstrating appropriate knowledge and practices. 2. Number of supervisory visits and continuing education classes received. | 1. Baseline and final KPC surveys. |

¹ ARHC/CSRA has experienced a problem with this measure because there are not enough children in the 6-10 age group to make the analysis meaningful.

NUTRITION IMPROVEMENT AND MICRONUTRIENTS (continued)

Intervention Goal: Promote optimal nutritional status among infants, children, and women of child-bearing age.

| Objectives by Project Area and Target Population | Indicator Goals | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|--|---|--|---|--|
| Provide Vitamin A supplements to children following MOH norms (one dose 6-11 months) (one dose 12-23 months): Carabuco: Ambana: Ancoraimcs: Puerto Acosta: | <u>Yr 1</u> <u>Yr 2</u> <u>Yr 3</u> <u>Yr 4</u> 55% 65% 75% 85% 10% 25% 40% 67% 35% 50% 67% 85% 10% 25% 40% 50% | 1. Promote Vitamin A supplementation during family education. 2. Document consumption, by individual. 3. Follow-up by field staff. | 1. Proportion of eligible children receiving supplements, consistent with MOH guidelines. | 1. Baseline and final KPC surveys. 2. Annual review of child health cards. |
| Increase proportion of women receiving Vitamin A after delivery: Carabuco: Ambana: Ancoraimcs: Puerto Acosta: | <u>Yr 1</u> <u>Yr 2</u> <u>Yr 3</u> <u>Yr 4</u> 45% 60% 70% 80% 10% 20% 30% 50% 45% 60% 70% 80% 15% 30% 40% 50% | 1. Promote Vitamin A supplementation during family education. 2. Document consumption, by individual. 3. Follow-up by field staff. | 1. Proportion of eligible women receiving supplements, consistent with MOH guidelines. | 1. Baseline and final KPC surveys. 2. Annual review of maternal health cards. |
| Increase proportion of women receiving 3-month supply of iron sulfate tablets during pregnancy: Carabuco: Ambana: Ancoraimcs: Puerto Acosta: | <u>Yr 1</u> <u>Yr 2</u> <u>Yr 3</u> <u>Yr 4</u> 20% 30% 40% 80% 5% 20% 33% 50% 20% 40% 60% 80% 15% 20% 30% 40% | 1. Promote Vitamin A supplementation during family education. 2. Document consumption, by individual. 3. Follow-up by field staff. | 1. Proportion of eligible women receiving supplements, consistent with MOH guidelines. | 1. Baseline and final KPC surveys. 2. Annual review of maternal health cards. |

MATERNAL AND NEWBORN CARE

Intervention Goal: Improve access and utilization of reproductive health services.

| Objectives by Project Area and Target Population | Indicator Goals | | | | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|--|-----------------|-------------|-------------|-------------|---|--|--|
| Increase the proportion of pregnant women receiving at least one prenatal care visit: Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Promote prenatal visits during home visits and group education. 2. Make prenatal care services consistently available to pregnant women. 3. Continuing education for field staff. 4. Follow up. | 1. Proportion of mothers with at least one prenatal care visit during a recent pregnancy. | 1. Annual review of program data. 2. Baseline and final KPC surveys. |
| Increase the proportion of pregnant women delivering in the presence of a trained person: Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Promote health professional deliveries. 2. Make these services consistently available to all pregnant women. 3. Continuing education for field staff. 4. Follow up. | 1. Proportion of pregnant women delivering in the presence of a health professional, TBA or other trained person. | 1. Annual review of program data. 2. Baseline and final KPC surveys. |
| Increase proportion of follow-ups for high-risk obstetrical cases following MOH norms: Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Yr 1</u> | <u>Yr 2</u> | <u>Yr 3</u> | <u>Yr 4</u> | 1. Provide staff education on the identification, follow-up, and referral of high-risk cases. 2. Complete personal registration for follow-up with high-risk cases. 3. Follow-up by field staff. 4. Inform and promote recognition of high-risk pregnancies during educational activities and home visits. | 1. Number of high-risk cases identified with follow-up according to norms and adequate care for high-risk pregnancy. | 1. Annual review of all identified high-risk pregnancy cases. 2. Final CS evaluation. |
| Monitor maternal deaths through verbal autopsy methodology. Carabuco: Ambana: Ancoraimes: Puerto Acosta: | <u>Year 4</u> | | | | 1. Provide training on the use of verbal autopsies to appropriate field staff. 2. Supervise verbal autopsy process. | 1. Number of maternal mortality cases successfully assessed. | 1. Ongoing review of verbal autopsies. 2. Final CS evaluation. 3. Annual review of program data. |

CHILD SPACING PROMOTION

Intervention Goal: Improve access and utilization of reproductive health services.

| Objectives by Project Area and Target Population | Indicator Goals | | Major Planned Activities | Outputs | Measurement Method, Data Source, and Frequency of Data Collection |
|---|-----------------|---------------|---|---|--|
| Increase percentage of women using modern family planning methods (pill, IUD, injections, foams/gels, condoms): | <u>Year 1</u> | <u>Year 4</u> | 1. Provide family education during home visits, group sessions, school sex education classes, and clinic visits. 2. Provide modern method family planning clinic services to all interested women. 3. Continuing education. 4. Follow-up by field staff. | 1. Number and proportion of women using a modern family planning method. | 1. Baseline and final KPC survey. 2. Annual review of program data. |
| Carabuco: | 10% | 20% | | | |
| Ambana: | 5% | 15% | | | |
| Ancoraimas: | 5% | 20% | | | |
| Puerto Acosta: | 5% | 10% | | | |
| Increase percentage of women using natural methods of family planning (rhythm and LAM): | <u>Year 1</u> | <u>Year 4</u> | 1. Provide family education during home visits, group sessions, school sex education classes, and clinic visits. 2. Provide natural family planning clinic services to all interested women and couples. 3. Continuing education. 4. Follow-up by field staff. | 1. Number and proportion of women using a natural family planning method. | 1. Baseline and final KPC survey. 2. Annual review of program data. |
| Carabuco: | 40% | 67% | | | |
| Ambana: | 40% | 67% | | | |
| Ancoraimas: | 50% | 67% | | | |
| Puerto Acosta: | 20% | 40% | | | |

C. Program Location

The project is located in three distinct health service areas and two additional provinces in rural altiplano Bolivia:

| <i>Project Name</i> | <i>Department</i> | <i>Province</i> | <i>Health District</i> |
|---------------------|-------------------|-----------------|------------------------|
| Carabuco/Ambana | La Paz | Camacho | Suches |
| Ancoraimes | La Paz | Omasuyos | Illampu |
| Puerto Acosta | La Paz | Camacho | Suches |
| | | | *Muñecas |
| | | | *Bautista Saavedra |

*Municipal leadership workshops only.

Location Description

Carabuco and Ancoraimes are located on the *altiplano* or high plains of Bolivia, about 3 to 4 hours from La Paz by vehicle. Puerto Acosta, also on the altiplano, is located about seven hours from La Paz partly on the shores of Lake Titicaca, bordering Peru. Muñecas and Bautista Saavedra provinces border the Camacho province on the east and north. The altitude in these areas ranges from about 11,500 to over 15,000 feet above sea level.

The combined population of the three areas where child survival activities will be carried out is estimated at 43,375 (not including Muñecas and Bautista Saavedra) and is almost exclusively populated by *Aymara* Indians. Target populations for child survival activities include 33,683 women, infants and children (including Muñecas and Bautista Saavedra). (See Section A. 2 for population tables.)

Approximately 46% of the population is illiterate with illiteracy rates among women about 64% and about 26% among men. (1994 Bolivian DHS) Access to education remains limited, with a little over one-half the population completing a primary (5th grade level) education.

The economic productivity of these areas is limited to a one harvest per year production, primarily potatoes and high altitude grains such as barley and quinoa. Animal husbandry (cattle, horses, sheep and llamas) is another source of income, as well as other limited service work in the larger communities. The altiplano population is gradually declining as more people move to urban areas, primarily La Paz and El Alto, in search of a better livelihood. The remaining population in these areas is increasingly older individuals, mothers and children.

Mothers are the primary caretakers of infants and children. As children get older they may become caretakers of their younger siblings and stay at home while mothers work in the fields. Major decisions about health care, which require family funds, are made by men. When fathers are not at home (working in the city, etc.), mothers are frequently hesitant to seek out health care whether for themselves or for their children.

ARHC/CSRA has identified various levels of high-risk groups. Infants under one month and between one and 12 months are considered high-risk groups because of the high mortality rates for these age groups. Pregnant women under 18 and over 35 years of age and women who have more than five children are considered high risk because of the expected high maternal mortality rates in these age groups. Within each project area, staff have further identified populations that are difficult to access and consider these populations to be high risk.

There are several challenges to the successful completion of this project. One particular constraint is the unstable local government environment and the lack of confidence among some communities in NGO capacity, based on past negative experience. The law of popular participation is still undergoing changes, creating uncertainty about municipal participation and support. Also, there is a cultural barrier between western medical practice and the traditional indigenous understanding of health versus illness. This is particularly difficult when developing educational materials. The classic health education messages proposed by WHO and UNICEF do not appear to be having much effect on behavior change, and there is a continuing need to redesign key messages to facilitate clearer communication.

Geographic access and poverty are serious constraints in many areas, especially the new service areas. Most of the population of this area have little or no cash income and do not participate in the formal economy. The low level of education, especially among women, is a chronic constraint in completing education objectives. Finally, the Camacho (Carabuco/Ambana/Puerto Acosta) and Omasuyos (Ancoraimes) provinces are the most severely impoverished areas of Bolivia.

Causes of Morbidity

Over the past ten years infant mortality rates in Bolivia have been steadily declining. (1994 Bolivian Demographic and Health Survey, DHS) The overall 1994 infant mortality rate is 75 per 1,000 live births in contrast to a 1984 estimate of 105, with considerable variation between urban and rural rates. The level of the mother's education, language used in the home, income and access to prenatal care affects these rates. For example, the 1994 rural infant mortality rate is reported to be 106, and the altiplano rate is 96 compared to 69 in urban areas. In cases where mothers have little or no education the rate is 122 compared to a rate of 38 for mothers who have some high school education. The mortality data collected by ARHC during the past ten years strongly suggest that the still-high rural and altiplano rates reported by the DHS are consistently underreporting actual rates, by as much as 33%.

Childhood mortality rates (less than five years of age) in Bolivia also have been decreasing. In 1984 the overall childhood mortality rate was measured at 168 and in 1994 it was reported to be 116. These rates also vary within the country, based on urbanicity, maternal education, income and geographic location. The average rate for rural areas is 162, while in the altiplano it is 142 and in urban areas it is 104. Among mothers with no education the childhood mortality rate is 187, while with mothers with some high school education the rate is reported to be 49.

The maternal mortality rate in Bolivia is very high. The 1994 Bolivian DHS reports 591 deaths per 100,000 live births for the altiplano, and an estimated 929 deaths per 100,000 live births in

the rural altiplano. For this reason, ARHC/CSRA has focused on strengthening maternal and reproductive health activities in the context of child spacing promotion. We will also consider low weekly doses of Vitamin A supplementation to pregnant women (which has been reported to reduce maternal mortality as much as 44%), given further positive reports in the published literature.

ARHC/CSRA has generated estimates of age-specific and cause-specific childhood morbidity and mortality rates for Carabuco and Ancoraimes. For example, in Carabuco the leading causes of death for children under five are asphyxia, malnutrition, diarrhea, accidents and stillbirths. In Ancoraimes the leading causes include asphyxia and ARI. (See tables below).

Leading Causes of Mortality for Children Under Five in Bolivia

| Cause of Death | Percentage |
|---------------------|------------|
| Diarrhea | 36% |
| ARI | 28.5% |
| Other | 19.2% |
| Accidents | 7.5% |
| Birth Complications | 4.3% |
| Tetanus | 3.3% |
| Measles | 1.2% |

Source: Instituto Nacional de Estadística. Encuesta Nacional de Demografía y Salud, Octubre 1994.

Primary Causes of Death for Infants and Children Under Five in the Carabuco and Ancoraimes Health Area, 1997

| Cause of Death | Carabuco | Ancoraimes |
|------------------------------|----------|------------|
| Malnutrition | 26% | 0% |
| Asphyxia | 20% | 21% |
| Diarrhea | 13% | 4% |
| Accidents | 7% | 4% |
| Stillborn | 7% | 17% |
| ARI | 7% | 21% |
| Sepsis | 7% | 4% |
| Ajayu or Susia (spirit loss) | 7% | 4% |
| Intestinal Obstruction | 7% | 0% |
| Fever | 0% | 4% |
| Other | 0% | 4% |
| Unknown | 0% | 17% |

Source: Final Evaluation data from Carabuco and Ancoraimes Project Areas, December 1997.

Public and Private Child Survival Related Programs

There are two public organizations working in the target project areas. Child Health Care (CCH) has a project entitled, *Strengthening the North Valley Altiplano Health District*, which is funded by USAID. Medicos Sin Frontera (MSF) has a project called *Strengthening the Illampu Health District*. The primary goal of these projects is to strengthen the managerial and administrative skills of district health personnel, who carry out child survival activities in the districts

mentioned. Key areas of work include: infrastructure, equipment, continuing education, community education and health management systems. The health services that they support correspond to state health services.

PLAN International Altiplano is the only other private organization working in the altiplano. They work in several Ancoraimes communities and coordinate their health-related activities with ARHC/CSRA. PLAN's goal is to improve the quality of life in communities where they work. They work in education, health, road infrastructure, and other development activities. Their health activities focus on strengthening health district personnel skills, especially in the areas of continuing and community education.

D. Program Design

The basic ARHC/CSRA intervention is based upon a census-based, impact-oriented (CBIO) approach to health care delivery. After establishing a working relation with a potential community, community health workers (CHWs) are identified from within the communities and trained to provide selected health care and education services. The CHWs coordinate with community members to conduct censuses of the service area, number houses, and draw maps of each community. They also collect and maintain basic demographic data and vital statistics (births, deaths, and migration) on each household and community. Then, they begin a schedule of regular home visits coupled with group health and nutrition education activities. Basic health services are also provided through centralized health clinics and remote health posts. The pattern of home visitation is based, in part, on local mortality data.

The CBIO approach permits project staff to assess the primary causes of illness and death within communities and focus program resources on resolving these health problems. The collection of high quality data, including census and vital events data, allow a precise measurement of service impact. Further, previous analyses have shown that the causes and patterns of mortality differ across the geographic zones in which ARHC works and have demonstrated clear improvements in key indicators, including a statistically significant reduction in the childhood mortality rate.

CSRA staff for each project site will be responsible for implementing CS activities. Direct health services are provided at each of the project health clinics and various health posts. In addition, community health workers (CHWs) will provide routine home visits. Both a CSRA and MOH sponsored physician are available in each of the service areas as well as a field supervisor.

CS services offered during this project may be described as either census-based, or as mobile team based, depending upon the status of the community. A basic goal of this project is to extend census-based services (which are much more comprehensive than the mobile team approach) from a baseline of 58 censused communities to a final set of 136 communities by project's end. In non-censused areas, mobile health teams will visit the more populous communities four times a year to offer basic curative services, as well as preventive education. In Puerto Acosta, ARHC/CSRA will let the communities in Puerto Acosta dictate the pace of geographic expansion and range of services offered.

Currently, the Carabuco area has one CHW per 1,141 inhabitants, Ancoraimes and Ambana have one CHW per 2,800 inhabitants, and Puerto Acosta has one CHW per 4,432 inhabitants. We plan to build toward having one CHW for every 1,500 to 2,000 inhabitants in order to effectively implement the CBIO approach.

In each service area personnel include: a public health physician in the position of local Project Director; an MOH sponsored physician; a field supervisor; paid field staff (mostly auxiliary nurses), part time community health volunteers, and limited support personnel. There are 53 paid employees among the three project sites and the entire staff is Bolivian. In Carabuco, CSRA maintains one recently renovated central health clinic and nine remote health posts. Ancoraimes has a six-bed hospital and three newly built remote health posts. In Puerto Acosta, there are currently two health posts in good condition and two in poor condition. Each program site has at least one vehicle, medical equipment and a pharmacy. The CSRA central office is located in La Paz and maintains a paid staff of 15.

Currently ARHC/CSRA is reviewing the content of the HIS and making necessary updates to improve tracking of selected CS indicators on a monthly and annual basis as well as improving the management of project implementation and reporting.

We will be offering training opportunities to municipal and community leaders both in our service areas, as well as in the adjacent provinces of Muñecas and Bautista Saavedra. Although the LHBs in these provinces have already been formed, they seldom meet. In fact, in some municipalities they have yet to formally meet. However, there is strong interest among community leaders and members for training future municipal leadership. We also hope to involve women in these training workshops, which would be an unusual and innovative step forward in Bolivia.

These training workshops will include such topics as: issues in public health; the contents of new Bolivian government laws related to health; the functions, responsibilities, and authorities within local health systems; planning and budgeting for health systems; financial analysis; and the principles of the CBIO methodology. The workshops will be offered at least twice annually during the four-year period. Three indicators we will use to evaluate the success of these workshops will be:

- increased geographical accessibility of health services and personnel through new or improved infrastructure and additional health staff;
- increased resources for primary health care as reflected in municipal budgeting and spending; and,
- increased activities of LHBs, with more meetings, better attendance, and increased scope and importance of the types of decisions undertaken.

Estimated ARHC/CSRA Beneficiary Population

Infants, Children and Women of Childbearing Age and Estimated Live Births

| | <i>Carabuco and Ambana¹</i> | <i>Ancoraimas²</i> | <i>Puerto Acosta³</i> | <i>Muñecas⁴</i> | <i>Bautista Saavedra⁵</i> | TOTAL |
|---|--|-------------------------------|----------------------------------|----------------------------|--------------------------------------|---------------|
| <i>Infants 0-11 months</i> | 285 | 340 | 599 | 314 | 176 | 1,714 |
| <i>Children 12-23 months</i> | 211 | 351 | 1,081 | 476 | 267 | 2,386 |
| <i>Children 24-59 months</i> | 854 | 1,226 | 1,236 | 1,372 | 769 | 5,457 |
| <i>Women of Childbearing Age (15-49 yrs.)</i> | 2,674 | 3,387 | 5,316 | 3,831 | 2,149 | 17,357 |
| <i>Children to 6 yrs.</i> | 410 | 439 | 688 | N/A | N/A | 1,537 |
| <i>Estimated Live Births (yrs. 2,3,4)</i> | 855 | 873 | 2,064 | 942 | 528 | 5,262 |
| TOTAL | 5,289 | 6,616 | 10,984 | 6,935 | 3,889 | 33,713 |

Current CSRA field staff are trained in all key CS intervention skills. The Community Health Workers (CHWs), Health Volunteers (HVs), supervisors and physicians will receive ongoing, subject-specific training during the course of the project.

CSRA actively collaborates with several hospitals in La Paz and El Alto in order to place patients with complicated problems, and most referred altiplano patients go to the Catholic Hospital in Escoma, where we maintain good relations. Patients are referred according to the quality of care and specialty of the hospital. ARHC/CSRA plan to increase the number of agreements with hospitals in the city of El Alto, which has several acceptable hospitals that are closer geographically to the project areas than La Paz. Also, many family members of patients live in El Alto.

ARHC/CSRA collaborates with other private organizations in all of the proposed project sites. In Ancoraimas, ARHC/CSRA works closely with the *Iglesia Evangelica Metodista Boliviana* (IEMB), which owns the infrastructure of the Ancoraimas hospital. ARHC/CSRA is currently in a second three-year agreement with the BMC for the management of their facility. The BMC also provides some funding for project activities.

Also in Ancoraimas, in July 1996 CSRA signed an agreement with CARE and the National Ecumenical Development Association (ANED) for the organization of women's community banks for microcredit access. CARE will provide funding and technical assistance and ANED will provide additional funding and will administer the credit to the village banks. CSRA also will provide funding and facilitate entrance into the communities, as well as meet with the groups of women to provide health-related activities.

As mentioned previously, PLAN International Altiplano works in several Ancoraimas communities and coordinates their health-related activities with ARHC/CSRA. PLAN's goal is to improve the quality of life in communities where they work. They work in education, health,

road infrastructure, and other development activities. Their health activities focus on strengthening health district personnel skills, especially in the areas of continuing and community education.

In all project areas, coordination will take place with the schools for the provision of selected health services, and especially for preventive health education activities. Limited coordination also will be explored with the Naval Base located within project area boundaries. INTERVIDA is a Spanish NGO that has provided limited support for the health system. For example, they paid to have the project dental equipment repaired.

ARHC/CSRA currently collaborate with the Peace Corps by sponsoring a water and sanitation volunteer, who is in the process of organizing a project for the Water and Sanitation Department of the Puerto Acosta local municipal government

E. Partnerships

Public Sector

The configuration of public health roles and responsibilities at the national, regional and local levels has changed twice in the last two years. These changes reinforce the observation that the Bolivian health care system has been, and probably will continue to be, in considerable flux.

Public health care providers in Bolivia include the Ministry of Health (MOH), the Department Health Units (DHU), the Health Districts, the Local Health Boards (LHBs) and the local network of public, private and non-profit health care providers. The MOH sets overall policies and direction of the health sector. The DHU is responsible for implementing national health policies at the departmental level. They are also responsible for staffing government health services and for developing departmental MOH budgets. The Health District is responsible for the implementation of national and regional health policies among several rural municipal governments and for the supervision of all personnel who receive salaries from the MOH. The LHB is responsible for the management of the health system for the municipality. The Oversight Committee (OC), which is democratically elected by the communities in a separate annual electoral process, is supposed to represent the interests of the communities in the activities of the municipal government, and to exercise control over municipal activities. Finally, the local network of health services is made up of the hospitals, health centers, and health posts offering services in each municipal jurisdiction.

The main resource contribution made by the MOH is salaried staff. During 1997, the MOH nearly doubled the number of staff in the project areas from 13 to 23, including physicians, graduate nurses, auxiliary nurses, dentists and support staff. However, projects remain understaffed, particularly the Puerto Acosta project area, so requesting more staff from the regional government will continue to be a priority. This will not be easy, especially over the next two years because the project areas recently received a large number of new positions and the MOH does not appear to have the resources to increase their commitment. The main limitation related to MOH personnel, particularly the physicians, dentists and graduate nurses, is the constant change due to the fact that they are assigned for just one year of obligatory service.

Changes among auxiliary nurses can be frequent also, and new staff frequently do not share the same vision or values as the ARHC/CSRA staff, making for delicate and often unstable staffing situations.

The government also provides certain medical supplies and materials, such as vaccines, vitamin A, iron supplements, TB medications and contraceptives. So far, this has proven to be a fairly reliable source of these supplies, with some notable exceptions. Although we have been able to account for the MOH's financial contribution for salaries, we have not been able to secure information about the costs of the medicines and supplies.

The municipal governments have recently become responsible for constructing, equipping and maintaining new and old health infrastructures in their respective jurisdictions. They are also required to pay the utility bills and other recurring operating expenses. Finally, they have been asked to fund the maternal and child health insurance package. Significant resources have been decentralized for the municipalities to undertake these responsibilities as well as similar ones in education, productive infrastructure (such as irrigation and electrification), culture and sports. The exact portion allocated for health is not specified, although we know a small portion (less than 3%) is for the insurance plan. In ARHC/CSRA's written agreements with each LHB, municipal governments have committed themselves to providing 10% of their budget toward the health care systems as counterpart contributions.

In addition to providing financial resources, the mayor or a representative presides over the LHB. This is designed to give local authorities more authority in the management of the health system. Unfortunately, MOH officials often appear not to understand this, and there are frequent unilateral decisions and conflicts over issues of personnel and resource allocations. Because the joint undertaking of the health system is new, LHBs in most rural areas do not meet more than once or twice a year. The principle responsibilities of the LHB include: 1) developing the budget for the local health system; 2) working with the regional health authorities to secure sufficient assignment of human resources; 3) monitoring and evaluating implementation of operational work plans of clinics and health posts; 4) harmonizing operational and strategic plans; 5) encouraging and developing written agreements for the provision of services with the different organization and institutions that make up the national health system; and 6) establishing their own policies and procedures according to guidelines provided by the MOH. (Summarized and translated from Article 23, Chapter V, Supreme Decree #24237.)

ARHC/CSRA will be working with authorities on developing a set of model policies and procedures covering issues including personnel, transportation, vehicle use and maintenance, communications, information systems, program evaluation and fixed asset use.

ARHC/CSRA will dedicate substantial project efforts toward networking in this very complex environment. CSRA's National Director, Technical Coordinator and local Project Directors will spend as much as 25% of their time promoting and participating in meetings, training sessions, visits and evaluations, both within each project area as well as in La Paz. Project accountants will also be actively involved in preparing proposals, up-to-date reports and presentation materials. Local administrators will be involved in monitoring construction and purchasing equipment, materials and supplies.

NGOs

ARHC/CSRA collaborates with several NGOs in the altiplano. In Ancoraimes in July 1996 CSRA signed an agreement with CARE and the National Ecumenical Development Association (ANED) for the organization of women's community banks for microcredit access. CARE will provide funding and technical assistance and ANED will provide additional funding and will administer the credit to the village banks. CSRA also will provide funding and facilitate entrance into the communities, as well as meet with the groups of women to provide health-related activities.

PLAN International Altiplano works in several Ancoraimes communities and coordinates their health-related activities with ARHC/CSRA. PLAN's goal is to improve the quality of life in communities where they work. They work in education, health, road infrastructure, and other development activities. Their health activities focus on strengthening health district personnel skills, especially in the areas of continuing and community education. INTERVIDA is a Spanish NGO that has provided limited support for the health system. For example, they paid to have the ARHC/CSRA dental equipment repaired.

ARHC/CSRA currently collaborate with the Peace Corps by sponsoring a water and sanitation volunteer, who is in the process of organizing a project for the Water and Sanitation Department of the Puerto Acosta local municipal government. The project will oversee quality, maintenance, and organizational aspects of community water systems among the 105 communities in the Puerto Acosta Area. The volunteer and his local counterpart are undergoing an inventory of existing water and sanitation infrastructure as well as an assessment of future needs. Also, Water For People, a non-profit formed by volunteers of the American Water Works Association (AWWA) who provide technical and professional expertise to water projects in developing nations, will be providing ARHC/CSRA with selected technical and financial support for various communities in the altiplano.

Community-Based Organizations

CSRA works closely with the *Sindicato Agrario* (union of small farmers) in each community, to which all families in the community belong. The *Sindicatos* make communal decisions and approval is required before censuses are undertaken. In fact, the census is undertaken with their participation. They meet periodically, about four to ten times a year, depending on the community. CHWs attend these meetings two or three times a year and report to the community on health related issues. The "General Secretary" of the *Sindicato* and his assistants (positions that are rotated among community members every year) participate in the annual inventory of the health post and meet with the CHW according to the prearranged schedules. Community members may present concerns about services with the General Secretary who, in turn, discusses these concerns with the local Project Directors or with a representative of the municipal government. Because of the annual changes in community authorities and the numerous demands on their time, it is often difficult to get community authorities involved and interested in the health system.

Communities are formally represented on the LHBs through the municipal Oversight

Committees (OCs). Although these committees as yet do not function well, the president of the OC (who also is democratically replaced every year) does sit on the LHB and participates in decision making processes. We will be providing training to OC members on the law of Popular Participation, public health issues, and the structure and functioning of the local health system.

F. Health Information System

The CSRA/ARHC Health Information System (HIS) is fully operational at all levels and an integral part of our health program services. CHWs collect health data on families using HIS forms created by staff and other forms from the MOH, during home visits and through clinic visits. CHWs also record data from group educational sessions in family health folders, which are then stored in health posts or clinics. The forms undergo revisions periodically in an effort to improve and streamline information. Key data collected include vaccination coverage, growth monitoring, and reported or observed illnesses and the treatments offered. Vital events also are updated regularly including births, deaths and migrations. Staff revise census data on an annual basis. CHWs summarize the data monthly onto standardized HIS reporting forms, give to supervisors for review, who pass the information along to the national and headquarters offices.

Field supervisors, who make periodic visits with field staff (CHWs and HVs), carry out ongoing monitoring of project activities. During these visits methods are reviewed and if problems are noted, they are immediately shared and retraining is provided. Supervisor's written assessments of field staff are reviewed bi-monthly by project directors, who then provide feedback to staff members.

Data collection information is shared with all staff during routine monthly meetings, including quality assurance meetings. Discussions in these meetings revolve around the nature and quality of the data, problems, and how to develop solutions to the problems. Program data is shared with communities through periodic presentations and through prominently displayed summaries of key data of interest to the communities.

Besides these monthly analyses, program progress will be monitored through annual evaluations, a mid-term evaluation, and a final KPC survey and final evaluation. For the past four years, ARHC/CSRA has implemented an annual project evaluation and planning process in all of its Bolivian project areas. These evaluations serve as learning tools for the community members, CHWs and other staff, in addition to being a basis for independent assessment of program progress. The evaluation begins with a workshop, usually of three to four days duration, for each project. Thus far, this has taken place during December. During that time, all project staff, selected La Paz administrative staff, and invited guests (including ARHC HQ staff) carefully review the annual plan for all objectives, activities and indicators of the year just ending, and review and analyze extant data which correspond to these indicators. These activities are conducted in a small group format, and the results presented in a plenary session. Comments are taken from the floor, and a set of recommendations for improvement finalized for each topical area on flip chart paper. A typist enters all presented data into a portable computer, and these results are later reviewed and finalized by the local project director as an annual evaluation report.

In January, the local project staff meet yet again for a three-day planning workshop. During that time they consider the activities of the past year, the results of the previous annual evaluation, and any other recommendations or considerations which may have arisen outside of the annual evaluation format. (For example, we may consider KPC data, the CS mid-term evaluation, or other evaluation reports required by other funding agencies). The result of this process is a comprehensive written annual plan, which includes quarterly benchmarks for all activities. More detailed quarterly plans are developed by staff during the year, and each CHW also prepares monthly plans, in order to organize the considerable work planned. On average, there are 18 topical areas which are included in the annual plan, and which include all interventions, reporting, training and supervision, and administrative support, among others.

An external consultant will conduct a mid-term evaluation during September 1999 and ARHC/CSRA staff will conduct a final evaluation during July 2001. Also, a KPC survey similar to the one conducted in November 1997 will be carried out in each project area during June 2001. EPI-Info statistical software will be used for data analysis of the KPC surveys.

Currently, ARHC/CSRA field supervisors use supervisory forms for verifying activities carried out by CHWs and to confirm there are adequate supplies of materials. (Please see Appendix G. for copies of these forms.) Field supervisors spend one day a month observing and assessing the knowledge and practices of each CHW and reviewing the available supplies, drugs and equipment. Upon completing the supervisory form, the field supervisor discusses the results with the CHW, focusing on strengths and weaknesses. Together they determine reachable goals to be achieved during the following month.

Although these forms are useful, they do not adequately measure the CHW's communication skills and performance of activities. In order to address this, Quality Improvement Checklists are being developed to standardize and improve key processes that CHWs conduct on a daily basis.

During the first year of the project, checklists on Behavior Change Communication and Growth Monitoring will be developed and modified for use in each project area. Tom Davis and Sara Lewis Espada will provide two days of training to field staff and three days of field testing. Training notes have already been prepared and translated into Spanish. In year two, staff will develop Pneumonia and Diarrheal Case Management checklists and in year three they will develop Child Spacing and Nutrition/Micronutrients. Each time a quality improvement checklist is implemented, the CHWs' scores will be recorded on the checklist. The staff will set goals for a steady progression of the scores. The focus will be on encouraging CHWs to continue doing what works, while informing them of what they still need to do to further improve their performance. Continuing education activities will then be linked to the results of the supervisory process by using the checklists to identify weaknesses.

Attachment 2
Team Members and Titles

Attachment 2: Mid-Term Evaluation Team Members and Titles

Note: The following persons were active participants in interviews and workshops.

Location: La Paz

| Name | Title |
|-------------------------|---------------------------------|
| Nathan Robison | Executive Director |
| Mirtha Aguilar | Project Director |
| Francisco Prudencio | Project Director |
| Gonzalo Medina | Administrator |
| Virginia Lozano | Coordinator/Reproductive Health |
| Maria Elena Ferrel | Technical Manager |
| Nelly Marca Rivera | Technical Advisor |
| La Rue K. Seims | Team Leader/Consultant |
| Sara Espada | Technical Manager/HQ |
| Marcela Mendoza | Secretary |
| Ramiro Lanque | Project Director |
| Franz Trujillo | Project Director |
| Jose Ibanez | Statistician |
| Gloria M. Laime | Director of Finance and Admin. |
| Ricardo Hidalgo | Director of Human Resources |
| Maria Eugenia Huanca | Coordinator/Reproductive Health |
| Martin Chiri | Supervisor, Ancoraimes |
| Joaquin Pacosillo | Supervisor, Ancoraimes |
| Maria Angelica Requelme | Nurse, Ancoraimes |
| Osbaldo Miranda | Administrator, Ancoraimes |
| Maclovio Mamani | Supervisor, Puerto Acosta |
| Luciano Tintaya | Supervisor, Puerto Acosta |
| Victor Hugo Medina | Administrator, Puerto Acosta |
| Basilia Laime | Coordinator/Reproductive Health |
| Ubaldo Quelali | Supervisor, Carabuco |
| Simeon Barra | Coordinator, Ambana |
| Prudencio Ramos | Logistician |
| Jose Luis Antezana | Assistant Logistician |
| Carla Mendoza | Accountant, Carabuco |
| Lucia Heredia | Accountant, La Paz |
| Nelly Mendieta | National Administration |
| Wilson Zambrana | Office Assistant |

Location: Carabuco

| Name | Title/Organization |
|------------------------|---------------------------------|
| Mirtha Aguilar | Project Director |
| Francisco Prudencio | Project Director |
| Ubaldo Quelali | Supervisor |
| Jose Luis Miranda | Area Doctor |
| Maria Perez | Nurse |
| Virginia Lozano | Coordinator/Reproductive Health |
| Luis Fernando Palacios | Dentist |
| Carla Mendoza | Accountant |
| Gonzalo Medina | Administrator |
| Francisco Quispe | Auxiliary Nurse |
| Cruz Apaza | Auxiliary Nurse |
| Jose Cutipa | Auxiliary Nurse |
| Gregoria Huanaco | Auxiliary Nurse |
| ismael Yuque | Auxiliary Nurse |
| Juan Carlos Quispe | Auxiliary Nurse |
| Maria Elena Ferrel | Technical Manager |
| Nelly Marca Rivera | Technical Advisor |
| La Rue K. Seims | Team Leader/Consultant |
| Sara Espada | Technical Manager/HQ |
| Marcela Mendoza | Secretary |
| Rene Yujra | Municipal Office |
| Felipe Mollinedo | HAM |
| Martha Rios | Intervida |
| Isidro Paucara | Driver |
| Luis Pacosillo | Caretaker |
| Jose Ibanez | Statistician |
| Jose Luis Antezana | Logistician |
| Juan Carlos Mendoza | Auxiliary Nurse |
| Carmen Cornejo | Regional MOH |
| Guillermo Teran | District Director, Camacho |
| Manuel Hilari | Municipal Office |
| Hugo Luna | Municipal Office |
| Gabriel Carl | Agricultural Center |
| Margarita Ticona | Promoter |
| Julia Rosa Chayna | Promoter |

Location: Ambana

| Name | Title/Organization |
|---------------------|---------------------------------|
| Mirtha Aguilar | Project Director |
| Francisco Prudencio | Project Director |
| Ernesto Limachi | Area Doctor |
| Damiana Escobar | Auxiliary Nurse |
| Simeon Barra | Coordinator |
| Ramon Surco | Auxiliary Nurse |
| Ernesto Cahuana | Auxiliary Nurse |
| Eduardo Kapa | Auxiliary Nurse |
| Gonzalo Medina | Administrator |
| Carla Mendoza | Contadora |
| Virginia Lozano | Coordinator/Reproductive Health |
| Toribio Tucupa | Promoter |
| María Elena Ferrel | Technical Manager |
| Nelly Marca Rivera | Technical Advisor |
| La Rue K. Seims | Team Leader/Consultant |
| Sara Espada | Technical Manager/HQ |
| Marcela Mendoza | Secretary |
| Isidro Paucara | Driver |
| Dr. Pérez | |
| Rene Yujra | Municipal Office |
| Apolinar | Agricultural Center |
| Luis Pascosillo | Porter |
| Jose Luis Antezana | Logistician |

Location: Ancoraimes

| <u>Name</u> | <u>Title/Organization</u> |
|----------------------|------------------------------------|
| Gustavo I. Tapia | National Health Advisor, PLAN Int. |
| Gabino Oruispe | Specialist in Natural Medicine |
| Alejandro Caudon | Reporter, Radio San Gabriel |
| Franz Tujillo | Project Director |
| Rosio Montes | Area Doctor |
| Maria Requelme | Nurse |
| Maria Eugenia Huanca | Coordinator |
| Jose Martinez | Dentist |
| Alba Blanca | Dentist |
| Martin Chiri | Supervisor |
| Joaquin Pacosillo | Supervisor |
| Osbaldo Miranda | Administrator |
| Paulino Loza | Auxiliary Nurse |
| Pablo Sinani | Auxiliary Nurse |
| Sabina Poma | Auxiliary Nurse |
| Hilarion Sunavi | Auxiliary Nurse |
| Luis Cacasaca | Auxiliary Nurse |
| Lourdes Puma | Auxiliary Nurse |
| Jacinto Castro | Auxiliary Nurse |
| Alejandro Casablanca | Driver |
| Pablo Apaza | Caretaker |
| Maria Elena Ferrel | Technical Manager |
| Nelly Marca Rivera | Technical Advisor |
| La Rue K. Seims | Team Leader/Consultant |
| Sara Espada | Technical Manager/HQ |
| Nelly Mendieta | Secretaria |
| Angel Revollo | District Director - Illampu |
| Felipe Copa | Coordinator - Lake District |
| Jose Luis Antezana | Logistician |
| Jose Ibanez | Statistician |
| Ernesto Calla | Coord. Of Rural Districts - La Paz |
| Elsa Quispe | Accountant |
| Miguel Sinani | Municipal Office |
| Alejandro Poma | Municipal Office |
| Miguel Sarzozo | President, Neighbors Association |
| Eleuterio Achata | Coordinator - Lake District |

Location: Puerto Acosta

| Name | Title/Organization |
|---------------------|---------------------------------|
| Ramiro Lanque | Project Director |
| Eliana Torrez | Area Doctor |
| Virginia Ticona | Nurse |
| Maria Zabala | Coordinator/Reproductive Health |
| Basilja Laime | Coordinator/Reproductive Health |
| Carla Cuba | Dentist |
| Maclovio Mamani | Supervisor |
| Luciano Tintava | Supervisor |
| Victor Hugo Medina | Administrator |
| Prudencio Ramos | Accountant |
| Isac Cordero | Auxiliary Nurse |
| Concepcion Apaza | Caretaker |
| Sixto Cancari | Driver |
| Jaime Avila | Driver |
| Felix Calla | Driver |
| Roxana Patzi | Area Doctor |
| Felipe Condori | Auxiliary Nurse |
| Bertha Quispe | Auxiliary Nurse |
| Isidro Huallpa | Auxiliary Nurse |
| Raul Calamani | Auxiliary Nurse |
| Maria Elena Ferrel | Technical Manager |
| Nelly Marca Rivera | Technical Advisor |
| La Rue K. Seims | Team Leader/Consultant |
| Sara Espada | Technical Manager/HQ |
| Nelly Mendieta | Secretary |
| Milton Pacheco | Municipal Council President |
| Enrique Machaca | Member Vigilance Committee |
| Laureano Machaca | Mayor |
| Jose Ibanez | Statistician |
| Samuel Aquisé Plata | Coordinator, Intervida |
| Calixto Quispe | UTIM |
| Silvia Gonzales | UTIM |

Attachment 3
Assessment Methodology

Attachment 3: Assessment Methodology

The mid-term evaluation was conducted in a participatory manner. At each of four project locations, interviews were held with stakeholders following by a workshop in which key evaluation topics were identified and addressed. Responses from the interviews regarding the key topics were shared with all participants at the workshops. After fieldwork was completed, staff from each of the project sites attended a final workshop in La Paz where project strengths/opportunities, weaknesses/threats, and recommendations from workshops held in the field were reviewed and revised. The La Paz workshop also included a session on lessons learned.

Fieldwork and workshops were completed according to the following schedule:

| | |
|----------------|---------------|
| December 2-3 | La Paz |
| December 6-8 | Carabuco |
| December 8-9 | Puerto Acosta |
| December 9-12 | Ambana |
| December 12-14 | Ancoraimenes |
| December 15-16 | La Paz |

Methods included:

- A. Analysis of quantitative data, including data from the information system and financial data.
- B. Interviews: The following categories of persons were interviewed in La Paz, Carabuco, Ambana, Ancoraimenes, and Puerto Acosta using interview guides developed according to the USAID Mid-Term Evaluation Guidelines
 - 1. Administrators
 - 2. Accountants
 - 3. District Director
 - 4. Director/El Consejo
 - 5. Program Director/El Consejo
 - 6. Project Director/El Consejo
 - 7. Information Technician
 - 8. Mothers
 - 9. Representative of SEDES
 - 10. Medical One-Year Intern
 - 11. Representative of HAM
 - 12. Representative of Another NGO in the Area
 - 13. Promoter
 - 14. Auxilliary Nurse

Questions in the interview guides were divided into the following sections:

1. Planning
2. Community Mobilization
3. Communication to Change Behavior
4. Use of Health Post
5. Institutional Strengthening
6. Training
7. Supervision
8. Administration
9. Human Resources
10. Finance
11. Logistics
12. Information System
13. Technical and Administrative Support
14. Sustainability Strategy
15. Recommendations in General

C. Focus Groups

Two focus groups were conducted during the evaluation which dealt with barriers to the use of family planning. One was held with women and the other with men.

D. Review of Clinic Data

Attachment 4
List of Persons Interviewed and Contacted

Attachment 4: List of Persons Interviewed and Contacted

Location: La Paz

| Name | Title |
|--------------------|----------------------------------|
| Ileana M. Baca | Coordinator of Activities, USAID |
| Robert Ridgley | General Director, Crecer |
| Nathan Robison | Executive Director |
| Gloria M. Laime | Director of Finance and Admin. |
| Maria Elena Ferrel | Technical Manager |

Location: Carabuco

| Name | Title |
|----------------------|----------------------------------|
| Paulina Hilari | Mother |
| Teodora Caparisona | Mother |
| Juana Capacicorra | Mother |
| Juana Coaquira | Mother |
| Antonia Quispe | Mother |
| Fortunata Tintaya | Mother |
| Plyandra Tintaya | Mother |
| Tomasa Gamarra | Mother |
| Terisa Caparisona | Mother |
| Maxima Quenta | Mother |
| Feligi Maynada | Mother |
| Ionicia Quenta | Mother |
| Margarita Hilari | Mother |
| Fabiana Hilari | Mother |
| Cilistina Hilari | Mother |
| Ryena Larnta | Mother |
| Engenia Coaquire | Mother |
| Eulogia Hilari | Mother |
| Pascuala Garmarra | Mother |
| Eduarda Coaquira | Mother |
| Regina Pacosillo | Mother |
| Juane Tintaye | Mother |
| Agustina Arnquipa | Mother |
| Naxima Laruta | Mother |
| Matiaga Coaquira | Mother |
| Feligi Maynada | Mother |
| Autonia Hilari | Mother |
| Sofia Avila | Mother |
| Nieves Hilari | Mother |
| Maria Hilari | Mother |
| Victoria Seruta | Mother |
| Pascuala Hilari | Mother |
| Reni Gupa | Rep. Municipal Health Commission |
| Felipe Mollinido | Administrator, Municipal Office |
| Julian Quispe Teobel | Secretary of Health |
| Juan de Dip estaca | Secretary of Health |
| Ganicoa | Secretary of Health |
| Mirtha Aguilar | Project Director |

Location: Ambana

| Name | Title |
|----------------------------|-------------------|
| Armando Clazaton | Promoter |
| Mopa Huire | Promoter |
| Francisco Alvarez | Promoter |
| Copusque Teofilo Serie | Promoter |
| Santiago Pampa | Promoter |
| Antonio Mauiani | Promoter |
| Parete | Promoter |
| Florencio Quispe Machace | Promoter |
| Schueriquien | Promoter |
| Rerie Sona Adicoza | Promoter |
| Pablo Chiara | Promoter |
| Gawar Quille | Promoter |
| Neniecio Quispe | Promoter |
| Chipuspuri | Promoter |
| Cipriano Choque | Promoter |
| Cumaptia | Promoter |
| Foibio Tucupa | Promoter |
| Chuani Benrake Mamaui | Promoter |
| Cutushuaya Pascua Mollo | Promoter |
| Caldria Lino Riveras | Promoter |
| Chorobauiba | Promoter |
| Jesus Quispe | Promoter |
| Izahuaza | Promoter |
| Simeon Barra | Supervisor |
| Ernesto Cadruana | Auxiliary Nurse |
| Eduardo Kapa Chiri | Auxiliary Nurse |
| Virginia Lozano | Coordinator |
| Ernesto Limachi Quispe | Area Doctor |
| Danriana Osiodrry | Auxiliary Nurse |
| Pedro Machicado Flores | Local Official |
| Sonobia Mamani | Local Official |
| Alberto Nina | Local Official |
| Francisco Mamani | Local Official |
| Chuani Chipuspori Pasavani | Local Official |
| Carla Mendosa | Accounting/Admin. |
| Damian Escobar | Accounting/Admin. |
| Isidro Panca | Accounting/Admin. |
| Francisco Prudencia | Accounting/Admin. |
| Gonzalo Medina | Accounting/Admin. |
| Mirtha Aguilar | Project Director |
| Ramon Sirco | Promoter |

Location: Ancoraimes

| Name | Title |
|--------------------|------------------------------------|
| Unknown | 35 Mothers in Okola Village |
| Unknown | 8 Fathers in Okola Village |
| Franz Trujillo | Project Director |
| Oswaldo | Administrator |
| Joaquin | Auxiliary Nurse |
| Martin | Auxiliary Nurse |
| Jose Luis | Logistician |
| Maria Requelence | Nurse |
| Rosio Montes | Medical Intern |
| Ernesto Calla | Coord. Of Rural Districts - La Paz |
| Sabina | Auxiliary Nurse |
| Angel Revollo | District Director - Ilampu |
| Gustavo I. Tapia | National Health Advisor, PLAN Int. |
| Ispaya Este | Mother |
| Defina Poma | Promoter |
| Clenoufe Poma | Promoter |
| Genero Pomo Pacoma | Promoter |
| Faustina Ponedosa | Promoter |
| Gabino Quispe | Promoter |
| Isaaca Poma Mamani | Promoter |
| Clemente Quispe | Promoter |
| Justina Burgoas | Promoter |
| Alberto Quispe | Promoter |
| Genara Mamani | Promoter |
| Francisco | International Eye Foundation |

Location: Puerto Acosta

| Name | Title |
|------------------------|---------------------------------|
| Samuel Aquise Plata | Coordinator, Intervida |
| Marta Rios | Intervida |
| Rafael Villa | Father (Hollomata Village) |
| Gregorio Villa | Father (Hollomata Village) |
| Justino Villa | Father (Hollomata Village) |
| Pascual Villa | Father (Hollomata Village) |
| Ernesto Mamani | Father (Hollomata Village) |
| Enrique Machaca | Father (Hollomata Village) |
| Antonio Quispe | Father (Hollomata Village) |
| Juan Arpa Mamani | Father (Hollomata Village) |
| Isabela Chambi | Mother (Hollomata Village) |
| Salina Quispe Cocarcio | Mother (Hollomata Village) |
| Benito Chogue Misa | Father (Hollomata Village) |
| Petrona Quispe | Mother (Hollomata Village) |
| Fricho Villa | Father (Hollomata Village) |
| Andrez Villca Mamani | Mother (Hollomata Village) |
| Damiana Mamani Machaca | Mother (Hollomata Village) |
| Modesta Muchaca | Mother (Hollomata Village) |
| Evaristo Mamani | Father (Hollomata Village) |
| Genaró Quispe | Father (Hollomata Village) |
| Martha Arpa | Mother (Hollomata Village) |
| Dr. Guermo | District Director |
| Paulina Villca | Promoter |
| Francisca Quenallata | Promoter |
| Leonard Agne | Accountant |
| Ramiro Llanque | Project Director |
| Hermare Mirtha Maya | Rep. Vicentinas (NGO) |
| Lanreano Machaca Yujra | Administrator, Municipal Office |

Attachment 5
Bar Charts of Indicators



EVALUACIÓN A MEDIO TÉRMINO PROYECTO CS XIII POR DE LOS PROYECTOS = PUERTO ACOSTA, CARABUCO, AMBANA, ANCORAIMES

| N° | INDICADOR | Puerto Acosta | | | | | | Carabuco | | | | | | Ambana | | | | | | Ancoraimes | | | | | |
|----|---|---------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|
| | | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | % | N° | % | N° | % |
| 1 | Porcentaje de 1ª Consulta de Control Prenatal * | 15 | 188 | 25.1 | 20 | 291 | 39.6 | 45 | 102 | 37.2 | 55 | 121 | 113 | 10 | 94 | 41.2 | 20 | 103 | 45.5 | 35 | 181 | 32.4 | 45 | 203 | 33.1 |
| 2 | Porcentaje de Partos Atendidos por Personal Capacitado * | 10 | 57 | 7.6 | 15 | 62 | 8.44 | 20 | 31 | 11.3 | 25 | 73 | 68.2 | 5 | 16 | 7.02 | 10 | 18 | 8.0 | 15 | 109 | 19.5 | 20 | 175 | 29.3 |
| 3 | % de Embarazadas con 90 Tabletas de Sulfato Ferroso * | 15 | | » | 20 | 60 | 20.6 | 20 | | » | 30 | 20 | 16.5 | 5 | | » | 20 | 11 | 10.7 | 20 | | » | 40 | 43 | 21.2 |
| 4 | ARO's con seguimiento según norma ** | 80 | | » | 85 | 27 | 35.5 | 50 | | » | 80 | 19 | 36.5 | 20 | | » | 35 | 20 | 30.8 | 67 | | » | 75 | 30 | 24.2 |
| 5 | % de Mujeres Embarazadas con 2 ó mas Dosis de Toxoide Tetánico ** | 15 | 32 | 23.5 | 20 | 53 | 25.5 | 40 | 61 | 71.8 | 45 | 75 | 66.4 | 25 | 13 | 39.4 | 30 | 48 | 58.5 | 45 | 138 | 67.3 | 50 | 147 | 57.9 |
| 6 | % de Mujeres en edad fértil con planificación Familiar (Método Natural) * | 20 | 82 | 1.8 | | 92 | 2.1 | 40 | 117 | 9 | | 121 | 9.4 | 40 | 76 | 5.6 | | 92 | 6.9 | 50 | 103 | 3.1 | | 397 | 11.2 |
| 7 | % de Mujeres en edad fértil con planificación Familiar (Método Moderno) * | 5 | 62 | 1.4 | | 113 | 2.6 | 10 | 27 | 2 | | 100 | 7.8 | 5 | 36 | 2.7 | | 81 | 6 | 5 | 38 | 1.2 | | 171 | 4.8 |
| 8 | Consultas nuevas en servicios * | | 5858 | 31.2 | | 5021 | 27.3 | | 2865 | 41.8 | | 3102 | 46.4 | | 1220 | 21.6 | | 1184 | 21.0 | | 2860 | 20.5 | | 3927 | 26.3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

Fuente: * SNIS Gestión 1999

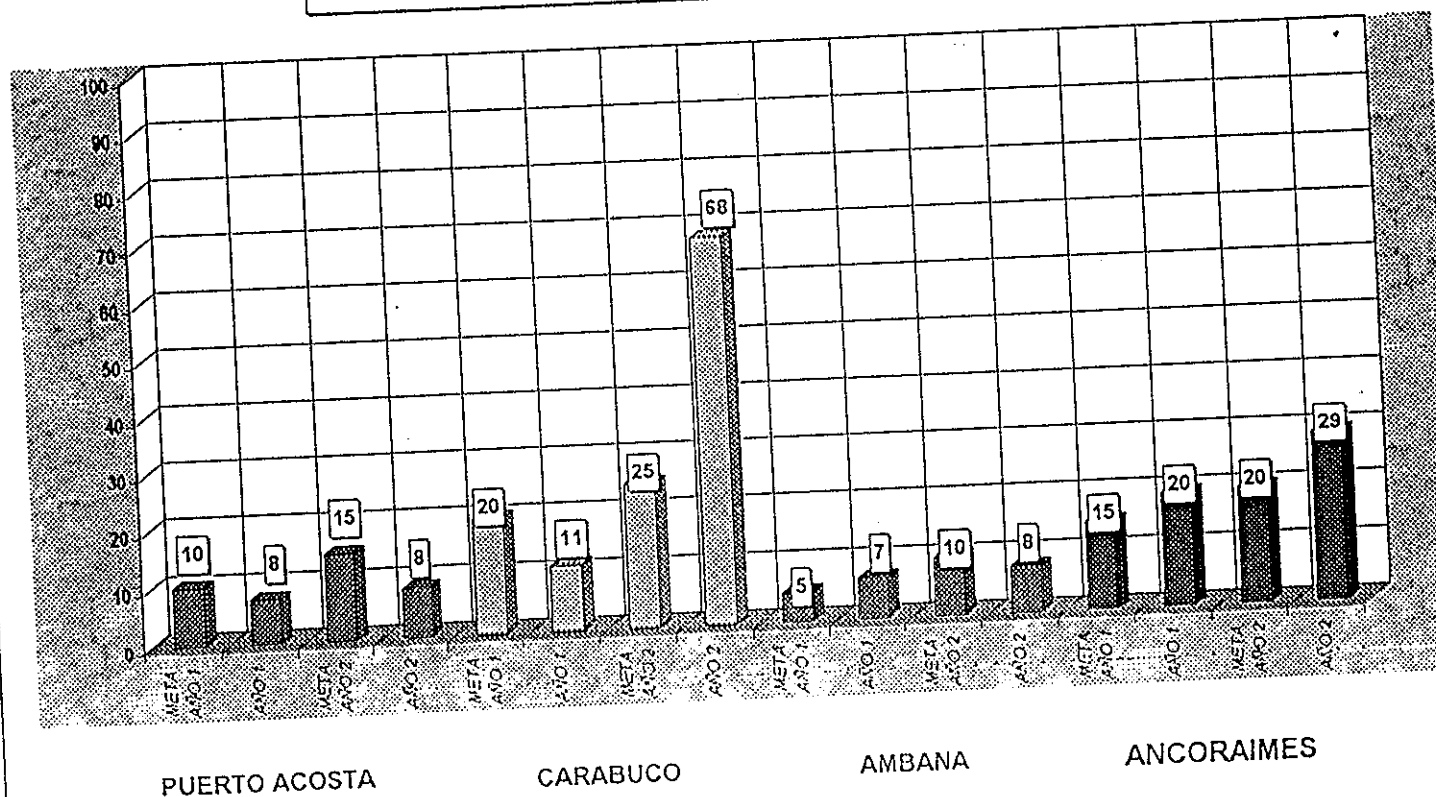
** Historias Clínicas Perinatales Bascas

» No se cuenta con datos

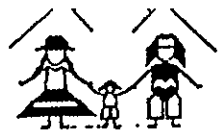
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES ATENCION INTEGRAL A LA MUJER Porcentaje de Partos Atendidos por Personal Capacitado *

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|--|---------------|----|-------|----|-------|------|----------|----|-------|----|-------|------|--------|----|-------|----|-------|------|------------|-----|-------|----|-------|------|
| | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° |
| 2 | Porcentaje de Partos Atendidos por Personal Capacitado * | 10 | 57 | 7.6 | 15 | 62 | 8.44 | 20 | 31 | 11.3 | 25 | 73 | 60.2 | 5 | 16 | 7.02 | 10 | 18 | 7.96 | 15 | 109 | 19.5 | 20 | 175 | 29.3 |

Porcentaje de Partos Atendidos por Personal Capacitado



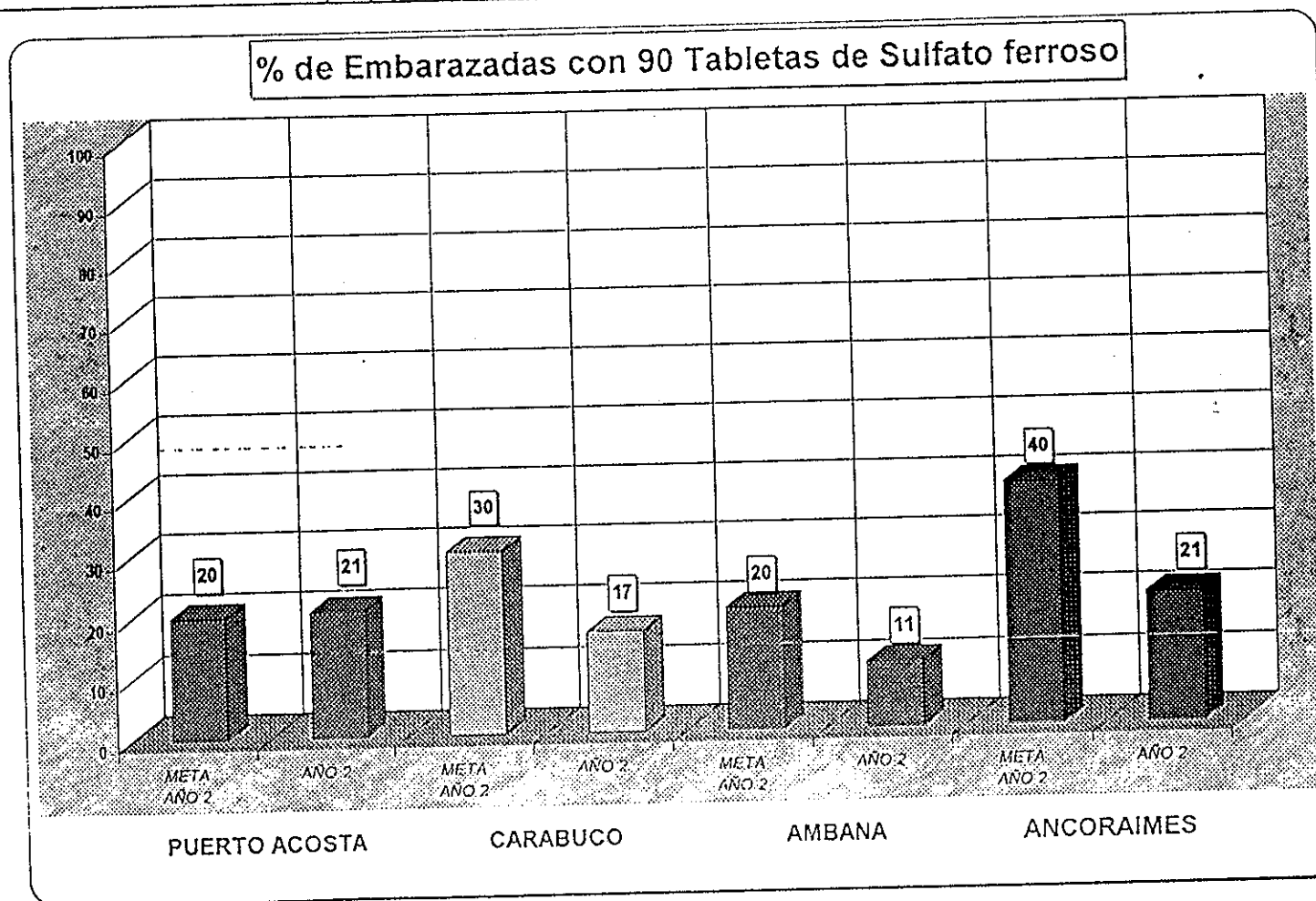
Fuente: SNIS Gestiones 1998 y 1999



CONSEJO DE SALUD RURAL ANDINO

**EVALUACION A MEDIO TERMINO PROYECTO CS XIII
POR PROYECTOS Y GESTIONES
ATENCION INTEGRAL A LA MUJER
% de Embarazadas con 90 Tablet de Sulfato Ferroso ***

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|----|---|-------|----|------|----------|----|---|-------|----|------|--------|---|----|-------|------|------|------------|----|---|-------|----|------|
| | | AÑO 1 | | | AÑO 2 | | | AÑO 1 | | | AÑO 2 | | | AÑO 1 | | | AÑO 2 | | | AÑO 1 | | | AÑO 2 | | |
| | | META | N° | % | META | N° | % | META | N° | % | N° | % | META | N° | % | N° | % | META | N° | % | N° | % | META | N° | % |
| 3 | % de Embarazadas con 90 Tablet de Sulfato Ferroso * | 15 | 0 | » | 20 | 60 | 20,6 | 20 | 0 | » | 30 | 20 | 16,5 | 5 | 0 | » | 20 | 11 | 10,7 | 20 | 0 | » | 40 | 43 | 21,2 |



Fuente: SMS Gestiones 1998 y 1999



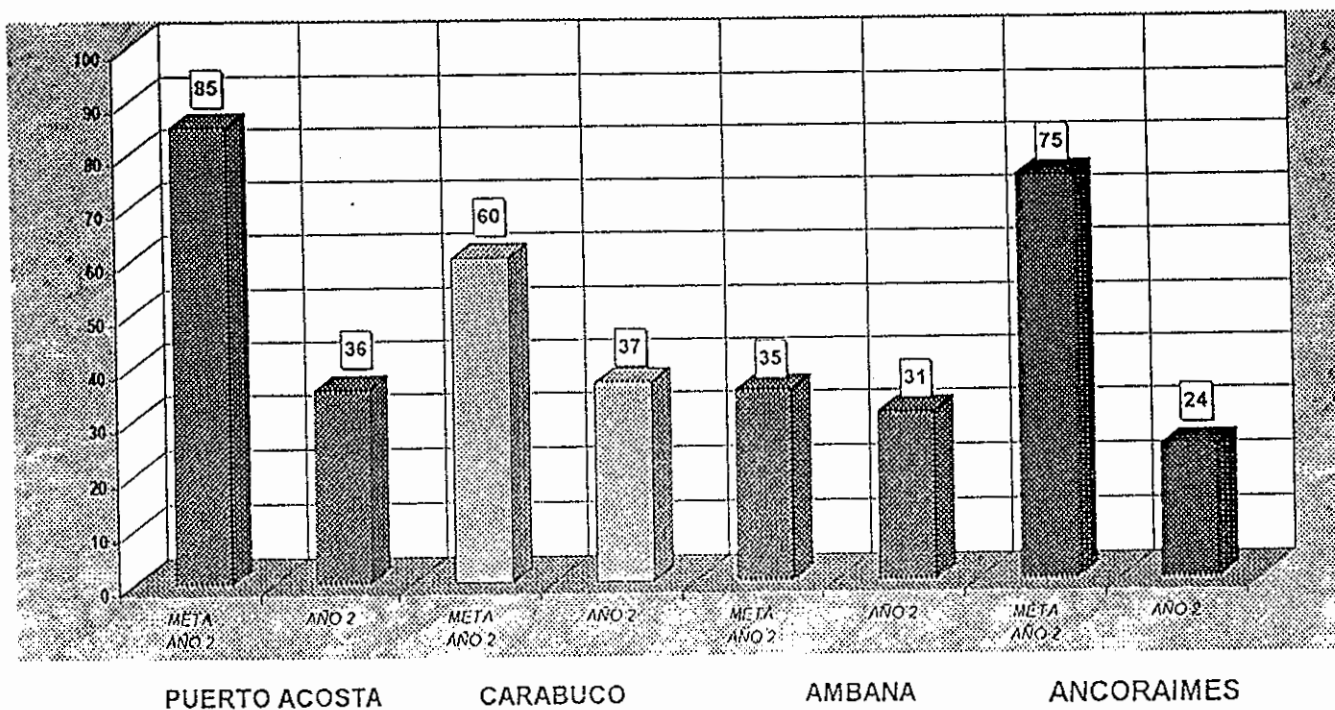
CONSEJO DE SALUD RURAL ANDINO

EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL A LA MUJER
ARO's con seguimiento según norma **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|--------------------------------------|---------------|---|------------|----|-------|------|------------|---|-------|----|------------|------|--------|---|------------|----|-------|------|------------|---|-------|----|----|------|
| | | META AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | | |
| | | N° | | % | | N° | | N° | | % | | N° | | % | | N° | | % | | N° | | % | | | |
| | | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | | |
| 4 | ARO's con seguimiento según norma ** | 80 | 0 | #### | 85 | 27 | 35.5 | 50 | 0 | " | 60 | 19 | 36.5 | 20 | 0 | " | 35 | 20 | 30.8 | 67 | 0 | " | 75 | 30 | 24.2 |

ARO's con seguimiento según norma



Fuente: Historias Clínicas Perinatales Básica



CONSEJO DE SALUD RURAL ANDINO

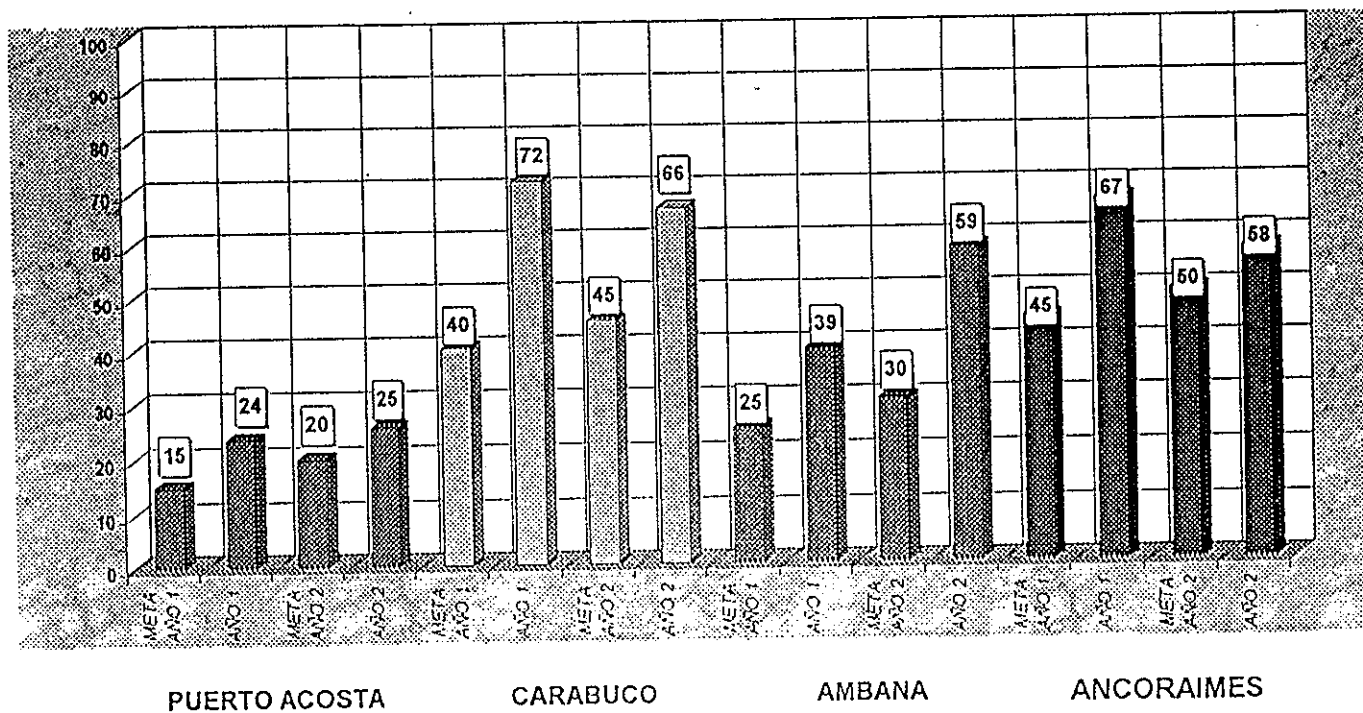
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL A LA MUJER

% de Mujeres Embarazadas con 2 ó mas Dosis de Toxoide Tetanico **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|----|------|-------|----|------|----------|----|------|-------|----|------|--------|----|------|-------|----|------|------------|-----|------|-------|-----|------|
| | | META | | | AÑO 1 | | | META | | | AÑO 1 | | | META | | | AÑO 1 | | | META | | | AÑO 1 | | |
| | | AÑO 2 | | | AÑO 2 | | | AÑO 2 | | | AÑO 2 | | | AÑO 2 | | | AÑO 2 | | | AÑO 2 | | | AÑO 2 | | |
| | | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % |
| 5 | % de Mujeres Embarazadas con 2 ó mas Dosis de Toxoide Tetanico ** | 15 | 32 | 23,5 | 20 | 53 | 25,5 | 40 | 61 | 71,8 | 45 | 75 | 66,4 | 25 | 13 | 39,4 | 30 | 48 | 58,5 | 45 | 138 | 67,3 | 50 | 147 | 57,9 |

Porcentaje de Mujeres Embarazadas con 2 ó mas Dosis de TT



Fuente: Historias Clínicas Perinatales Básica



CONSEJO DE SALUD RURAL ANDINO

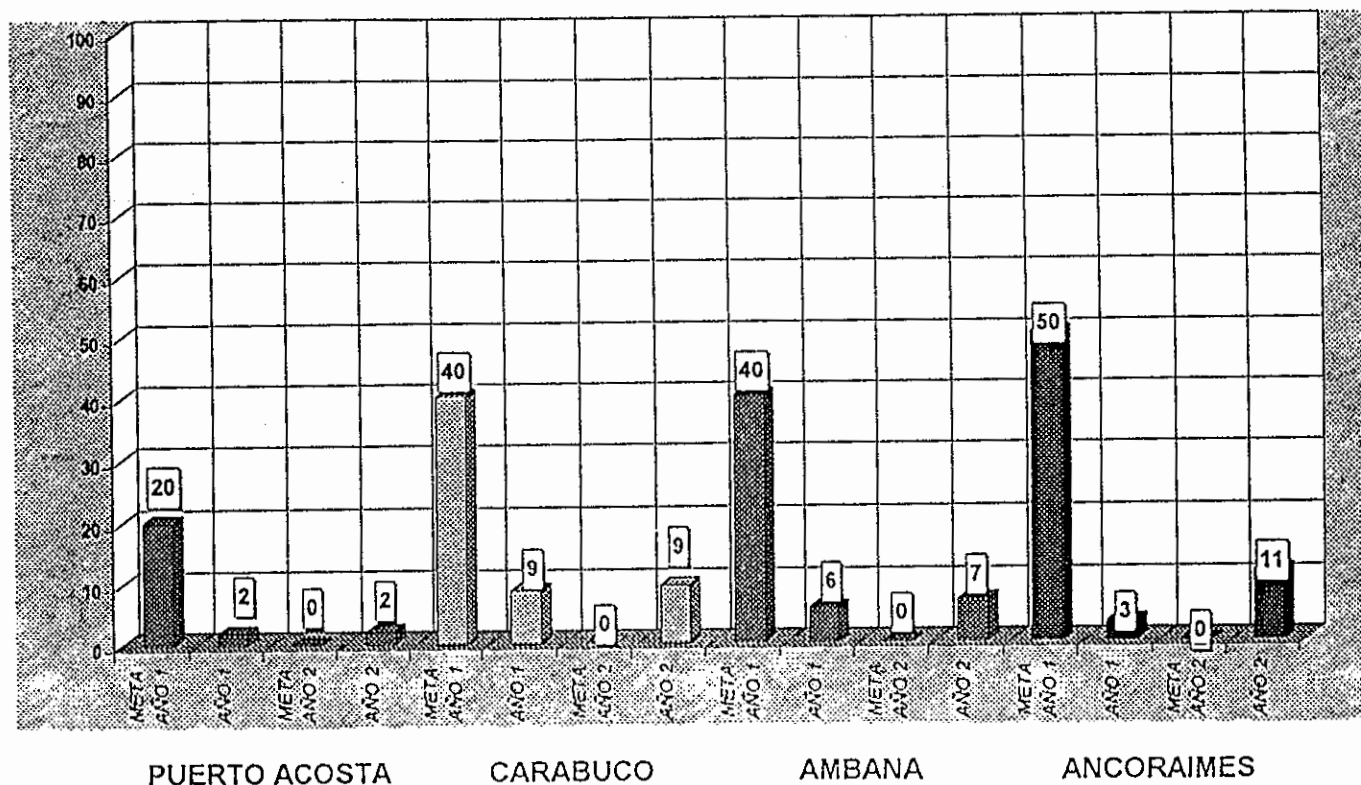
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL A LA MUJER

% de Mujeres en edad fértil con planificación Familiar (Método Natural) *

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|
| | | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 | META AÑO 1 | AÑO 1 | META AÑO 2 | AÑO 2 |
| | | % | HP | % | HP | % | HP | % | HP | % | HP | % | HP | % | HP | % | HP | % | HP | % | % | HP | % | % | HP |
| 6 | % de Mujeres en edad fértil con planificación Familiar (Método Natural) * | 20 | 82 | 1.84 | 0 | 92 | 2.11 | 40 | 117 | 0.65 | 0 | 121 | 9.4 | 40 | 76 | 5.63 | 0 | 92 | 6.9 | 50 | 103 | 3.12 | 0 | 397 | 11.2 |

Porcentaje de Mujeres en Edad Fértil con Planificación Familiar (Método Natural)



Fuente: SNIS Gestiones 1998 y 1999



CONSEJO DE SALUD RURAL ANDINO

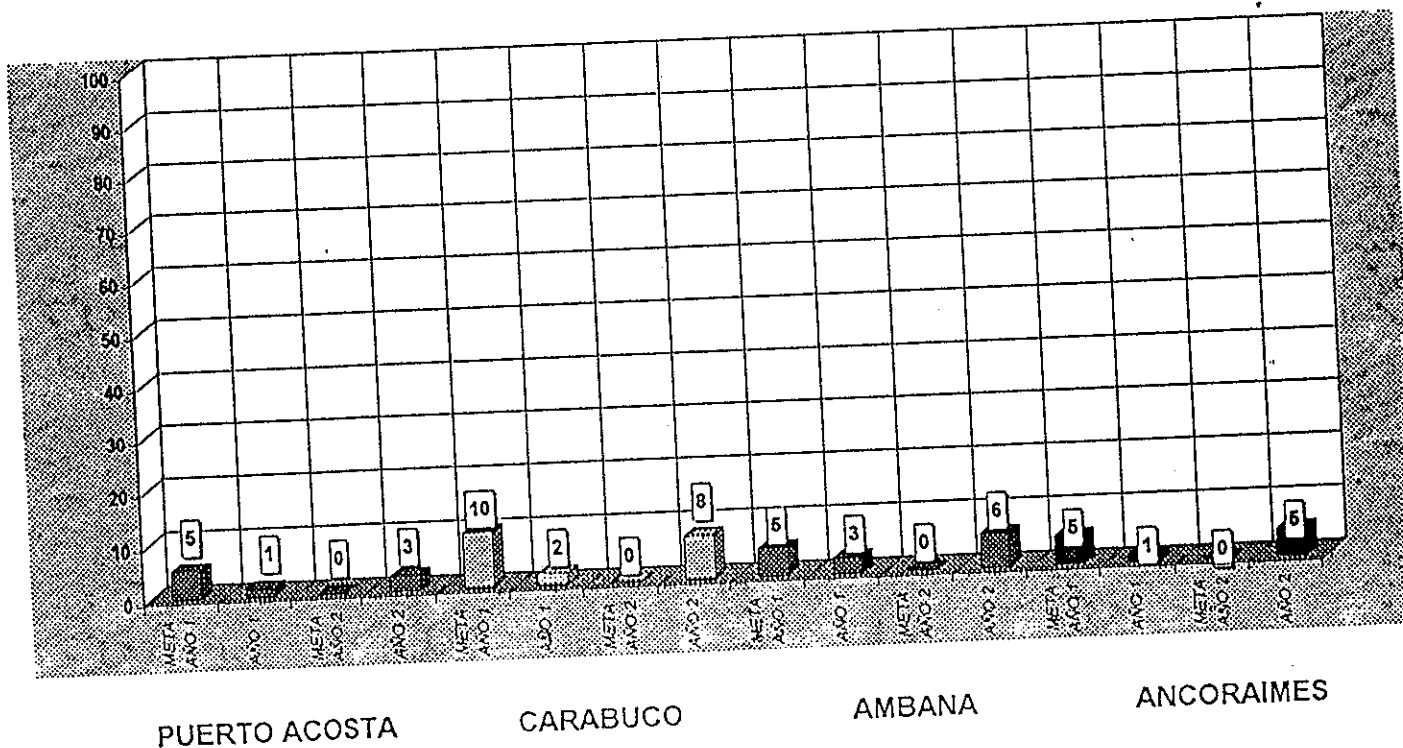
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL A LA MUJER

% de Mujeres en edad fértil con planificación Familiar (Método Moderno) *

| Nº | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|----|-------|---|-------|-----|----------|----|-------|---|-------|-----|--------|----|-------|---|-------|---|------------|----|-------|---|-------|-----|
| | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | |
| | | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % | Nº | % |
| 7 | % de Mujeres en edad fértil con planificación Familiar (Método Moderno) * | 5 | 62 | 1,39 | 0 | 113 | 2,6 | 10 | 27 | 2 | 0 | 100 | 7,8 | 5 | 36 | 2,67 | 0 | 81 | 6 | 5 | 38 | 1,15 | 0 | 171 | 4,8 |

Porcentaje de Consulta en servicios



Fuente: SNIS Gestiones 1998 y 1999

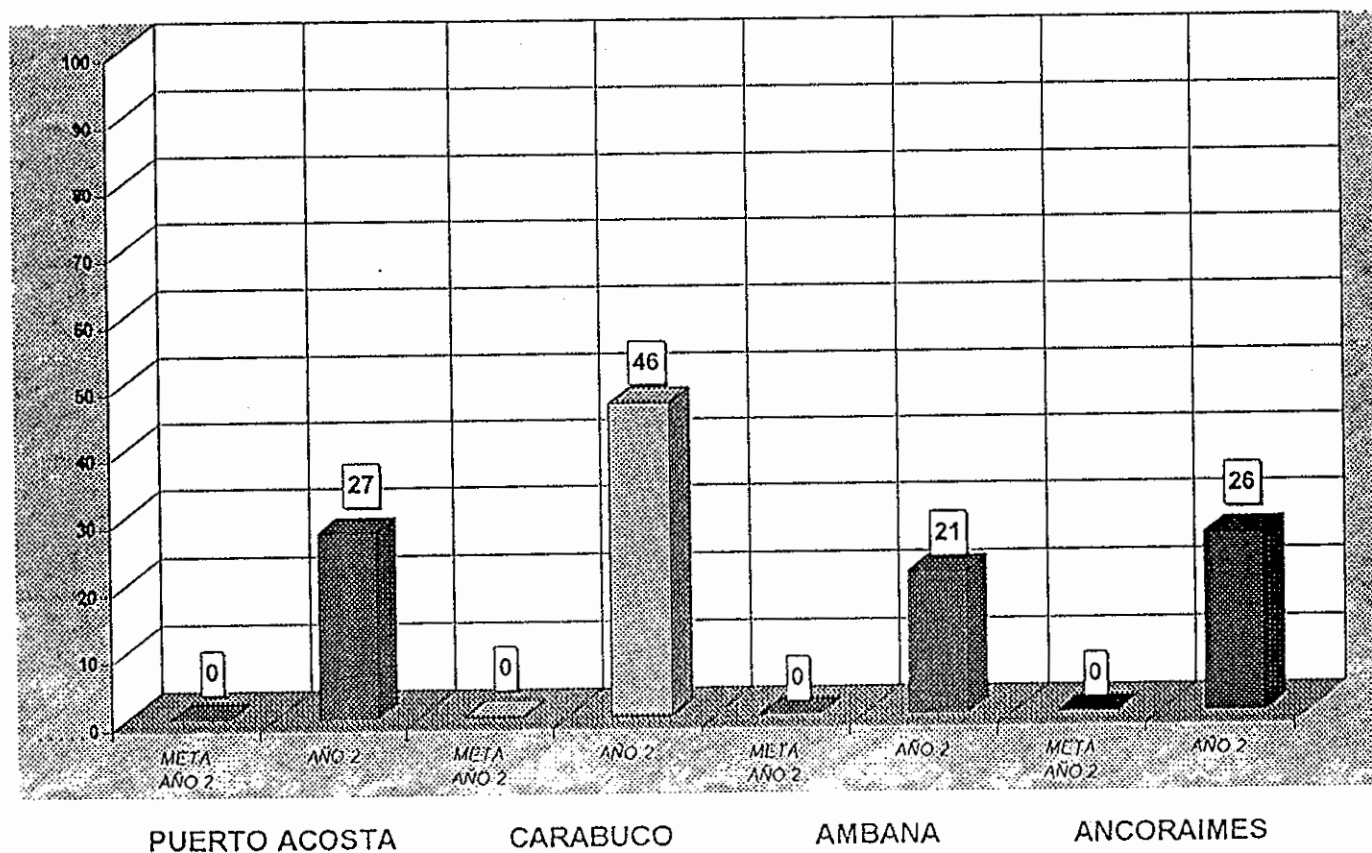


CONSEJO DE SALUD RURAL ANDINO

**EVALUACION A MEDIO TERMINO PROYECTO CS XIII
POR PROYECTOS Y GESTIONES
ATENCION INTEGRAL A LA MUJER
Consultas nuevas en servicios ***

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---------------------------------|---------------|------|-------|---|------------|------|----------|------|------------|---|-------|------|------------|------|-------|---|------------|----|------------|------|------------|---|-------|------|
| | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | |
| | | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % |
| 8 | Consultas nuevas en servicios * | 0 | 5038 | 31.2 | 0 | 5021 | 27.3 | 0 | 2065 | 41.8 | 0 | 3102 | 46.4 | 0 | 1220 | 21.6 | 0 | 1184 | 21 | 0 | 2060 | 20.5 | 0 | 3927 | 26.3 |

Porcentaje de Consultas nuevas en Servicio



Fuente: SNIS Gestiones 1996 y 1999



EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS = PUERTO ACOSTA, CARABUCO, AMBANA Y ANCORAIMES

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUGO | | | | | | AMBAYA | | | | | | ANCOA/AMBLES | | | | | |
|----|--|---------------|-----|------------|-----|------------|------|------------|-----|------------|-----|------------|------|------------|-----|------------|-----|------------|------|--------------|-----|------------|-----|------------|-------|
| | | META AÑO 1 | | META AÑO 2 | | META AÑO 3 | | META AÑO 1 | | META AÑO 2 | | META AÑO 3 | | META AÑO 1 | | META AÑO 2 | | META AÑO 3 | | META AÑO 1 | | META AÑO 2 | | META AÑO 3 | |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | % | N° | % |
| 1 | Vacunación Antipolio 1ª dosis en Menores de 1 año * | 100 | 424 | 84.7 | 100 | 423 | 86.2 | 100 | 117 | 86 | 100 | 106 | 100 | 100 | 186 | 122 | 100 | 155 | 103 | 100 | 392 | 105 | 100 | 368 | 92.2 |
| 2 | Vacunación Antipolio 3ª dosis en Menores de 1 año * | 100 | 321 | 64.1 | 100 | 340 | 68.3 | 100 | 143 | 105 | 100 | 110 | 104 | 100 | 134 | 88.2 | 100 | 151 | 99.9 | 100 | 346 | 93 | 100 | 384 | 91.2 |
| 3 | Vacunación DPT 1ª dosis en Menores de 1 año * | 100 | 441 | 88.1 | 100 | 414 | 84.4 | 100 | 117 | 86 | 100 | 106 | 100 | 100 | 187 | 123 | 100 | 151 | 99.9 | 100 | 387 | 104 | 100 | 360 | 90.2 |
| 4 | Vacunación DPT 3ª dosis en Menores de 1 año * | 100 | 343 | 68.5 | 100 | 339 | 69.1 | 100 | 143 | 105 | 100 | 110 | 104 | 100 | 134 | 88.2 | 100 | 151 | 99.9 | 100 | 345 | 92.7 | 100 | 362 | 90.7 |
| 5 | Vacunación BCG en Menores de 1 año * | 100 | 356 | 71.1 | 100 | 318 | 64.8 | 100 | 129 | 84.8 | 100 | 108 | 102 | 100 | 148 | 97.4 | 100 | 122 | 80.7 | 100 | 355 | 95.4 | 100 | 394 | 98.8 |
| 6 | Vacunación ANTISARAMPIONOSA en niños de 12 a 23 meses * | 100 | 497 | 121 | 100 | 136 | 90.2 | 100 | 139 | 158 | 100 | 114 | 92.7 | 100 | 190 | 156 | 100 | 182 | 131 | 100 | 334 | 110 | 100 | 348 | 105.7 |
| 7 | Cobertura de Esquema Completo en niño de 12 a 23 meses ** | 45 | 319 | 77.7 | 45 | 251 | 43 | 80 | 125 | 142 | 80 | 112 | 94.1 | 50 | 103 | 62 | 20 | 134 | 79.3 | 85 | 297 | 97.4 | 75 | 307 | 91.6 |
| 8 | Cobertura de Esquema Completo en niño de 12 a 15 meses ** | 5 | | | 10 | 177 | 42.4 | 58 | | | 63 | 33 | 91.7 | 6 | | | 10 | 119 | 70.4 | 30 | | | 35 | 271 | 80.9 |
| 9 | Proporción de niños con CCD según norma en niños 0 a 23 meses ** | 10 | | | 20 | 276 | 33.7 | 75 | | | 80 | 162 | 83.5 | 10 | | | 20 | 129 | 42.6 | 36 | | | 46 | 433 | 67.9 |
| 10 | Proporción de niños con CCD en su 1er mes de vida ** | 0 | 82 | 46.5 | 10 | 178 | 69.3 | 140 | 96 | 82.1 | 140 | 75 | 87.2 | 5 | 57 | 34.1 | 10 | 55 | 37.4 | 30 | 155 | 46 | 40 | 167 | 57.4 |
| 11 | Cobertura de Administración de 1 dosis de Vita "A" según norma niños de 6 a 11 meses ** | 10 | | | 25 | 265 | 56 | 58 | | | 83 | 42 | 71.2 | 10 | | | 25 | 52 | 61.2 | 35 | | | 50 | 106 | 81.5 |
| 12 | Cobertura de Administración de 1 dosis de Vita "A" según norma niños de 12 a 23 meses ** | 10 | | | 25 | 369 | 61.6 | 55 | | | 65 | | | 10 | | | 25 | | | 30 | | | 80 | 333 | 96.8 |

Fuente: * SNS Gestión 1999 y 1998
** Censos de Salud Infantil
» No se Cuenta con Datos

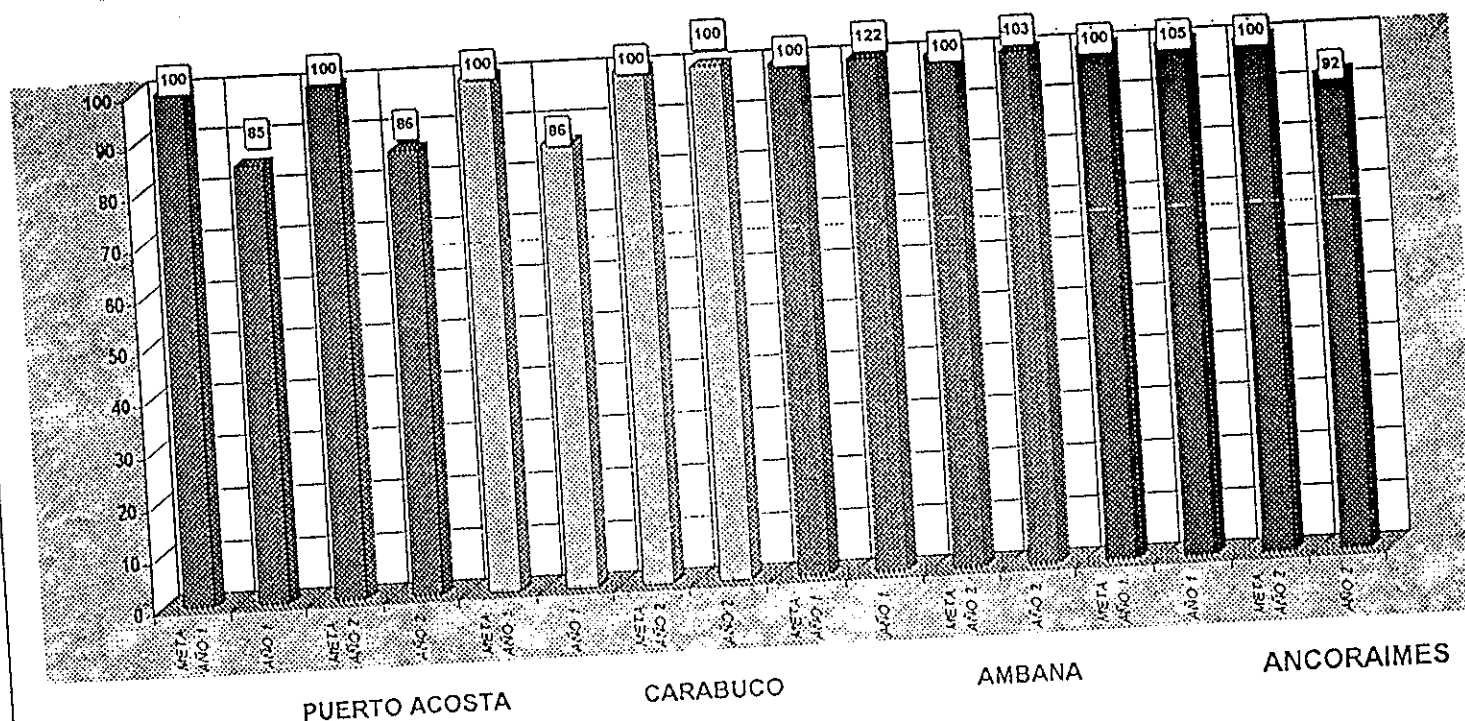


EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS
Vacunación Antipolio 1ª dosis en Menores de 1 año *

| N° | | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|-----------|---------------|------|------------|-----|-------|-----|------------|----|-------|-----|------------|-----|--------|-----|------------|-----|-------|-----|------------|-----|-----|-----|------|--|
| | | | META AÑO 1 | | META AÑO 2 | | AÑO 1 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 1 | | META AÑO 2 | | AÑO 1 | | META AÑO 2 | | | | | |
| | | | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | | | | |
| | | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | | | |
| 1 | Vacunación Antipolio 1ª dosis en Menores de 1 año * | 100 | 424 | 84.7 | 100 | 423 | 86.2 | 100 | 117 | 86 | 100 | 106 | 100 | 100 | 106 | 122 | 100 | 155 | 103 | 100 | 392 | 105 | 100 | 368 | 92.2 | |

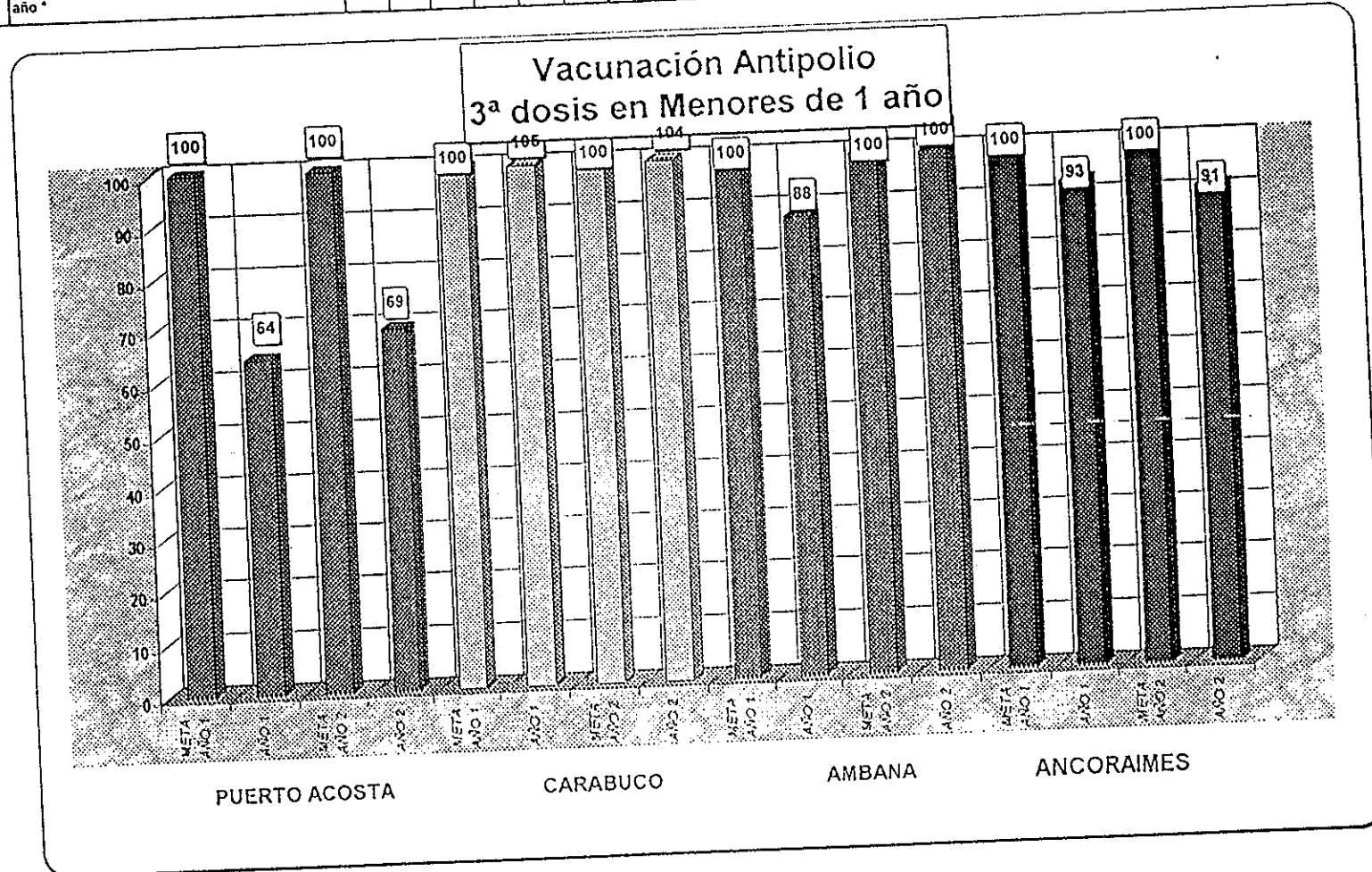
Vacunación Antipolio
1ª dosis en Menores de 1 año



EVALUACIÓN A MEDIO TERMINO PROYECTO XS XIII POR PROYECTOS Y GESTIONES

ATENCIÓN INTEGRAL AL MENOR DE 5 AÑOS
Vacunación Antipolio 3ª dosis en Menores de 1 año *

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|-----|-------|-----|-------|------|----------|-----|-------|-----|-------|-----|--------|-----|-------|-----|-------|------|------------|-----|-------|-----|-------|------|
| | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | |
| | | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % |
| 2 | Vacunación Antipolio 3ª dosis en Menores de 1 año * | 100 | 321 | 64.1 | 100 | 340 | 69.3 | 100 | 143 | 105 | 100 | 110 | 104 | 100 | 134 | 88.2 | 100 | 151 | 99.3 | 100 | 346 | 93 | 100 | 364 | 91.2 |



Fuente: SNIS Gestiones 1998 y 1999

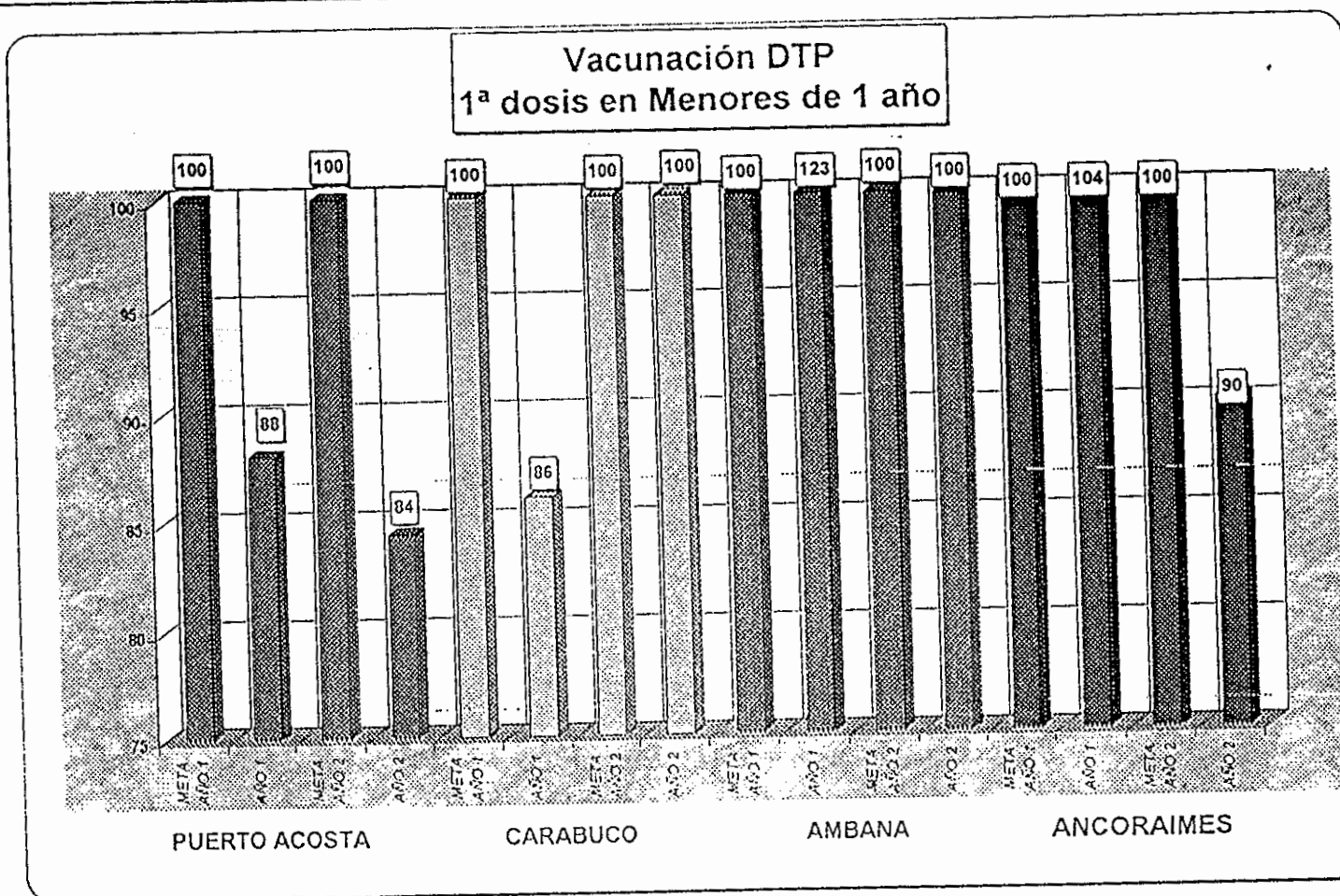


CONSEJO DE SALUD RURAL ANDINO

EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS
Vacunación DPT 1ª dosis en Menores de 1 año *

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|-------|------|------|-------|------|----------|-------|----|------|-------|-----|--------|-------|-----|------|-------|------|------------|-------|-----|------|-------|------|
| | | META | AÑO 1 | | META | AÑO 2 | | META | AÑO 1 | | META | AÑO 2 | | META | AÑO 1 | | META | AÑO 2 | | META | AÑO 1 | | META | AÑO 2 | |
| | | V | N° | % | V | N° | % | V | N° | % | V | N° | % | V | N° | % | V | N° | % | V | N° | % | V | N° | % |
| 3 | Vacunación DPT 1ª dosis en Menores de 1 año * | 100 | 441 | 88.1 | 100 | 414 | 84.4 | 100 | 117 | 86 | 100 | 106 | 100 | 100 | 187 | 123 | 100 | 151 | 99.9 | 100 | 387 | 104 | 100 | 360 | 90.2 |



Fuente: SNIS Gestiones 1998 y 1999

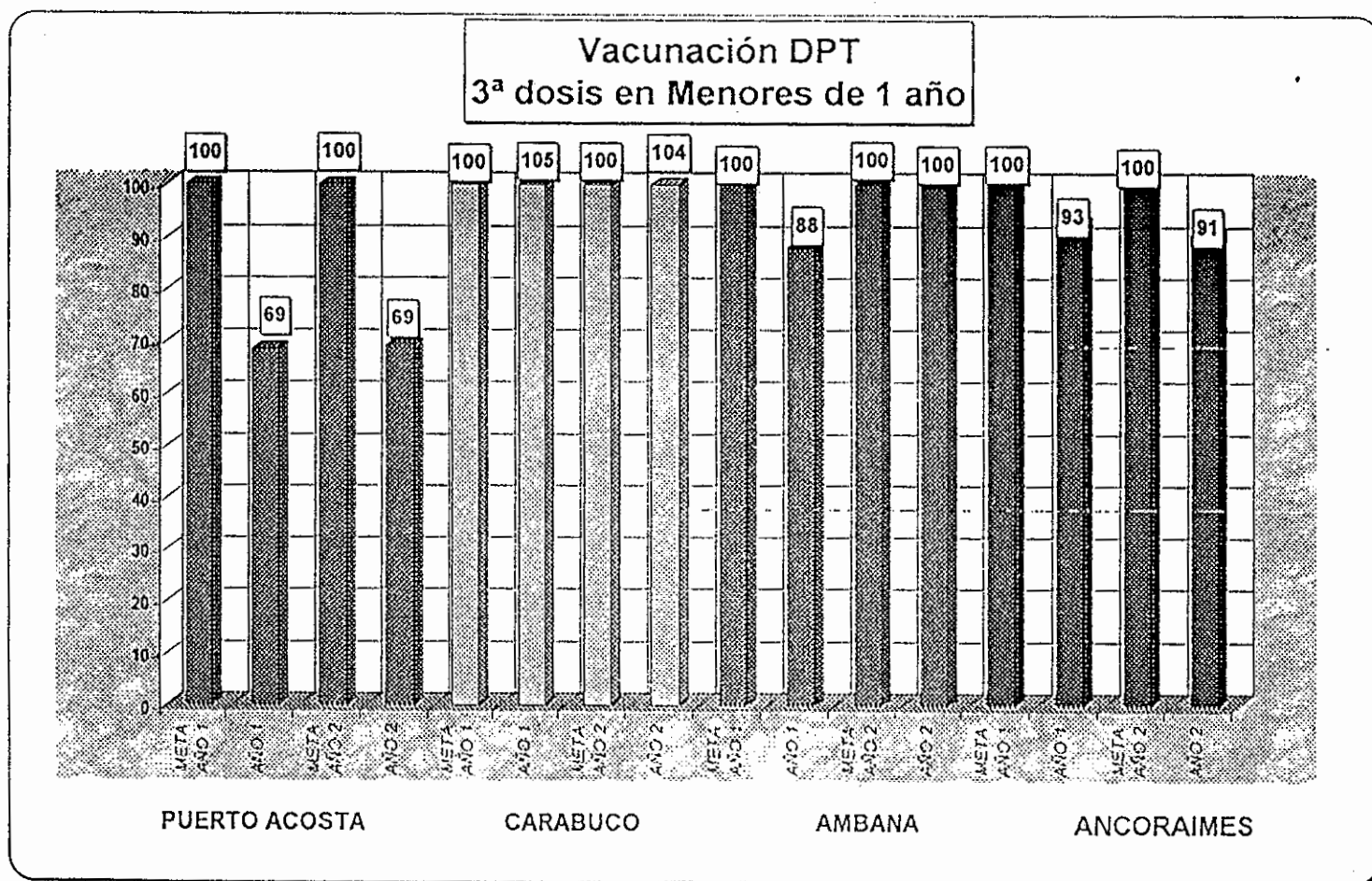


CONSEJO DE SALUD RURAL ANDINO

EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS
Vacunación DPT 3ª dosis en Menores de 1 año *

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|-----|------|-------|-----|------|----------|-----|-----|-------|-----|-----|--------|-----|------|-------|-----|------|------------|-----|------|-------|-----|------|
| | | AÑO 1 | | | AÑO 2 | | | AÑO 1 | | | AÑO 2 | | | AÑO 1 | | | AÑO 2 | | | AÑO 1 | | | AÑO 2 | | |
| | | META | N° | % | META | N° | % | META | N° | % | META | N° | % | META | N° | % | META | N° | % | META | N° | % | META | N° | % |
| 4 | Vacunación DPT 3ª dosis en Menores de 1 año * | 100 | 343 | 68.5 | 100 | 339 | 69.1 | 100 | 143 | 105 | 100 | 110 | 104 | 100 | 134 | 88.2 | 100 | 151 | 99.9 | 100 | 345 | 92.7 | 100 | 362 | 90.7 |



Fuente: SNIS Gestiones 1998 y 1999

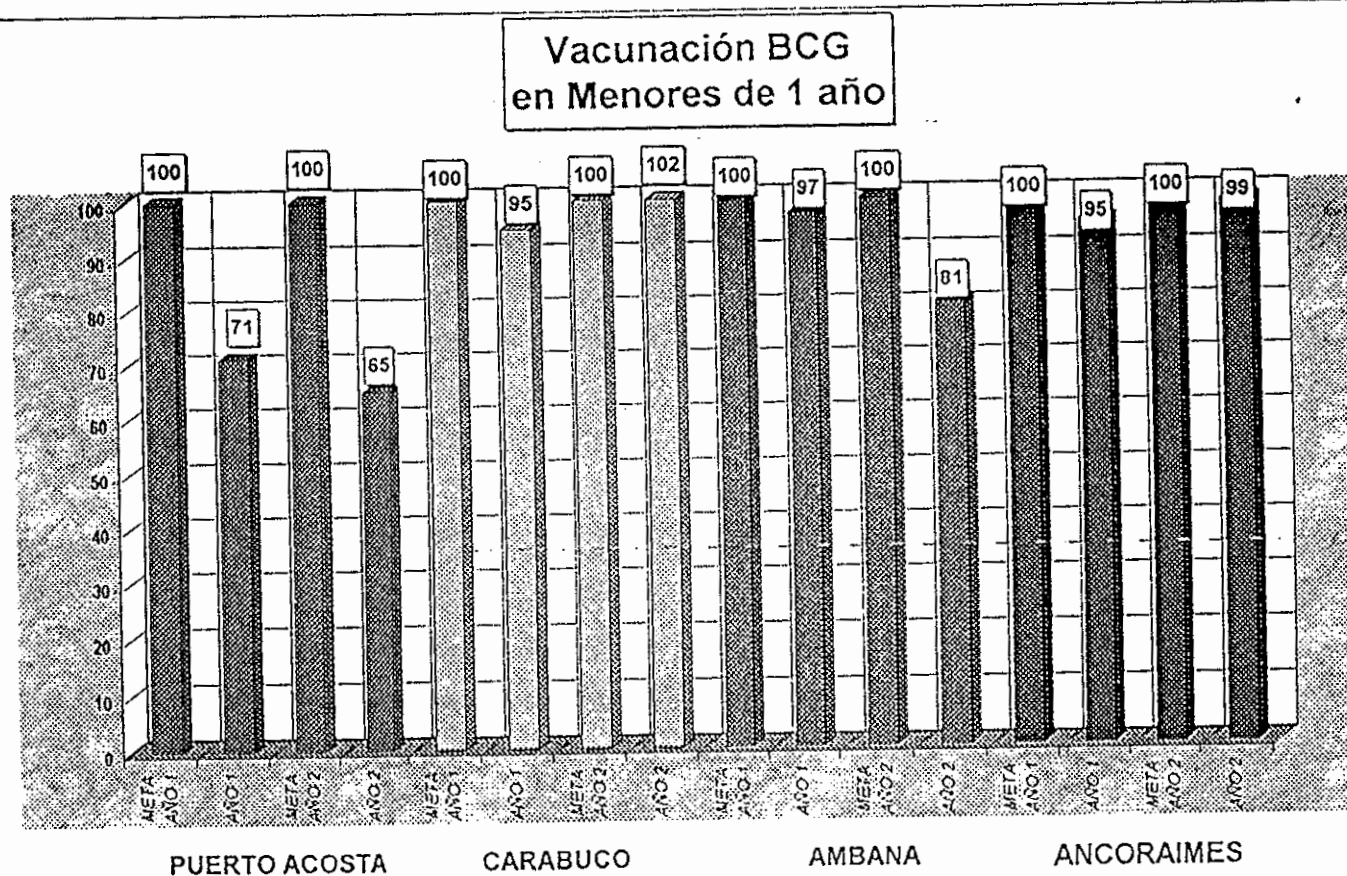


CONSEJO DE SALUD RURAL ANDINO

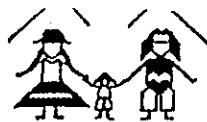
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCIÓN INTEGRAL AL MENOR DE 5 AÑOS
Vacunación BCG en Menores de 1 año *

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|--------------------------------------|---------------|-----|-------|-----|------------|------|----------|-----|------------|-----|-------|-----|------------|-----|-------|-----|------------|------|------------|-----|------------|-----|-------|------|
| | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | % | N° | % | N° | % |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | % | N° | % | N° | % |
| 5 | Vacunación BCG en Menores de 1 año * | 100 | 356 | 71.1 | 100 | 318 | 64.8 | 100 | 129 | 94.9 | 100 | 108 | 102 | 100 | 148 | 97.4 | 100 | 122 | 80.7 | 100 | 355 | 95.4 | 100 | 394 | 98.8 |



Fuente: SNIS Gestiones 1990 y 1991



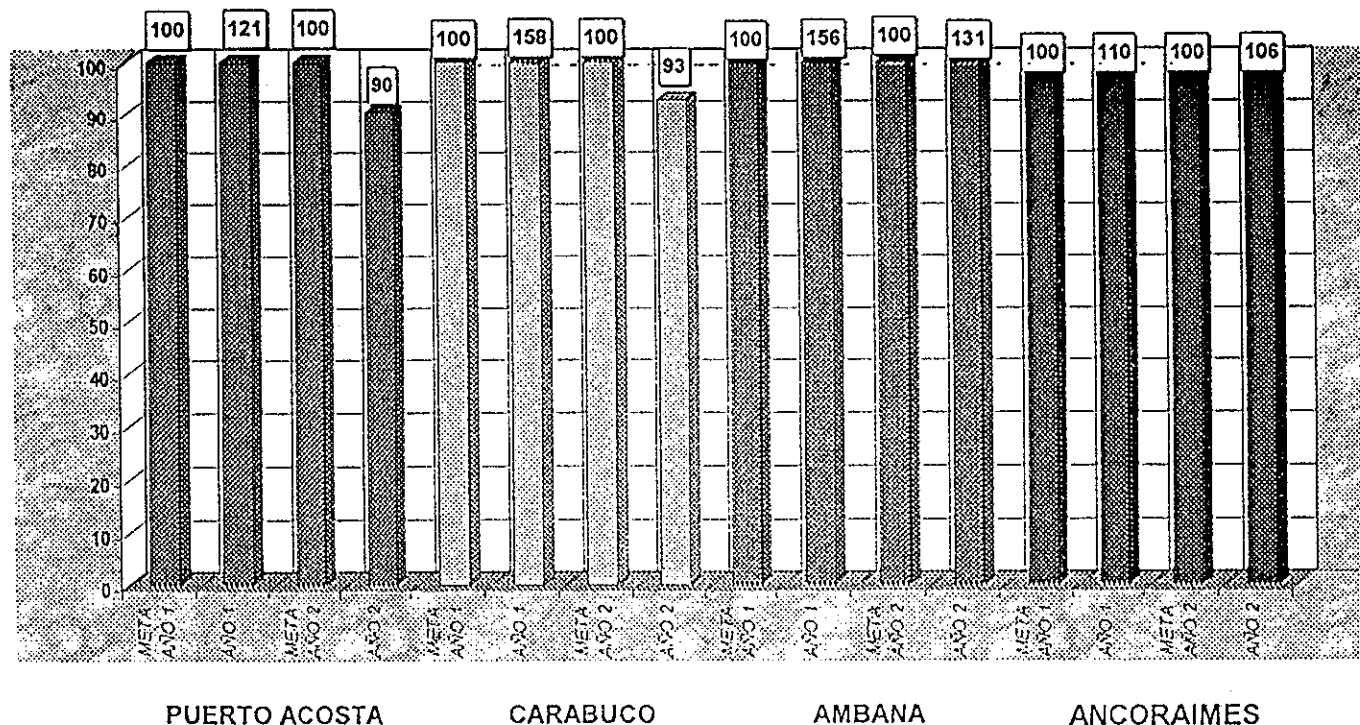
CONSEJO DE SALUD RURAL ANDINO

EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS
Vacunación ANTISARAMPIONOSA en niños de 12 a 23 meses *

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|-----|-------|-----|------------|------|----------|-----|------------|-----|-------|------|------------|-----|-------|-----|------------|-----|------------|-----|------------|-----|-------|-----|
| | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | % | N° | % | N° | % |
| 6 | Vacunación ANTISARAMPIONOSA en niños de 12 a 23 meses * | 100 | 497 | 121 | 100 | 136 | 90,2 | 100 | 139 | 158 | 100 | 114 | 92,7 | 100 | 190 | 156 | 100 | 162 | 131 | 100 | 334 | 110 | 100 | 346 | 106 |

Vacunación ANTISARAMPIONOSA en niños de 12 a 23 meses



Fuente: SNIS Gestiones 1998 y 1999



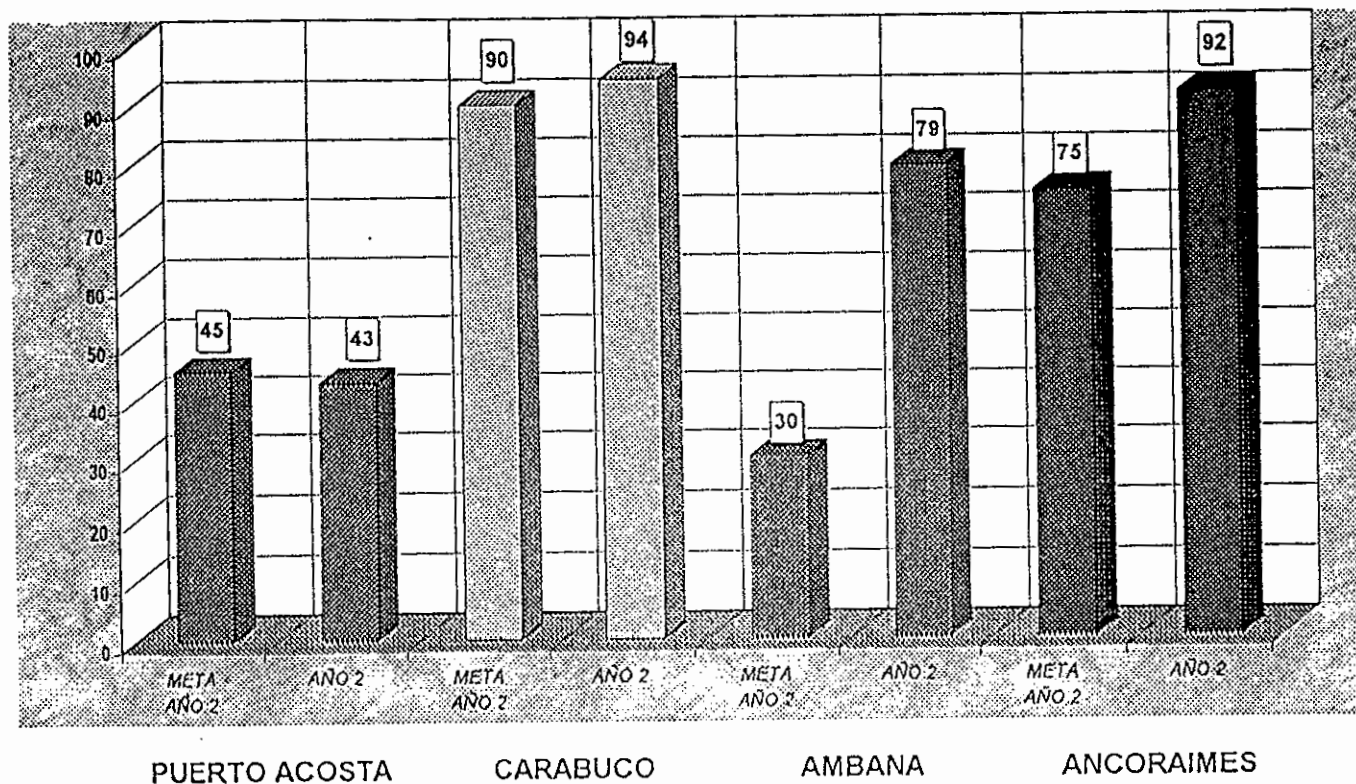
CONSEJO DE SALUD RURAL ANDINO

EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCIÓN INTEGRAL AL MENOR DE 5 AÑOS
Cobertura de Esquema Completo en niño de 12 a 23 meses **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|-----|-------|----|------------|----|----------|-----|------------|----|-------|----|------------|-----|-------|----|------------|----|------------|-----|------------|----|-------|----|
| | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | |
| | | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % |
| 7 | Cobertura de Esquema Completo en niño de 12 a 23 meses ** | 35 | 319 | 78 | 45 | 251 | 43 | 90 | 125 | 142 | 90 | 112 | 94 | 20 | 103 | 62 | 30 | 134 | 79 | 65 | 297 | 97 | 75 | 307 | 92 |

Cobertura de Esquemas Completos
en niños de 12 a 23 meses



Fuente: Carnets de Salud Infantil - Gestiones 1999



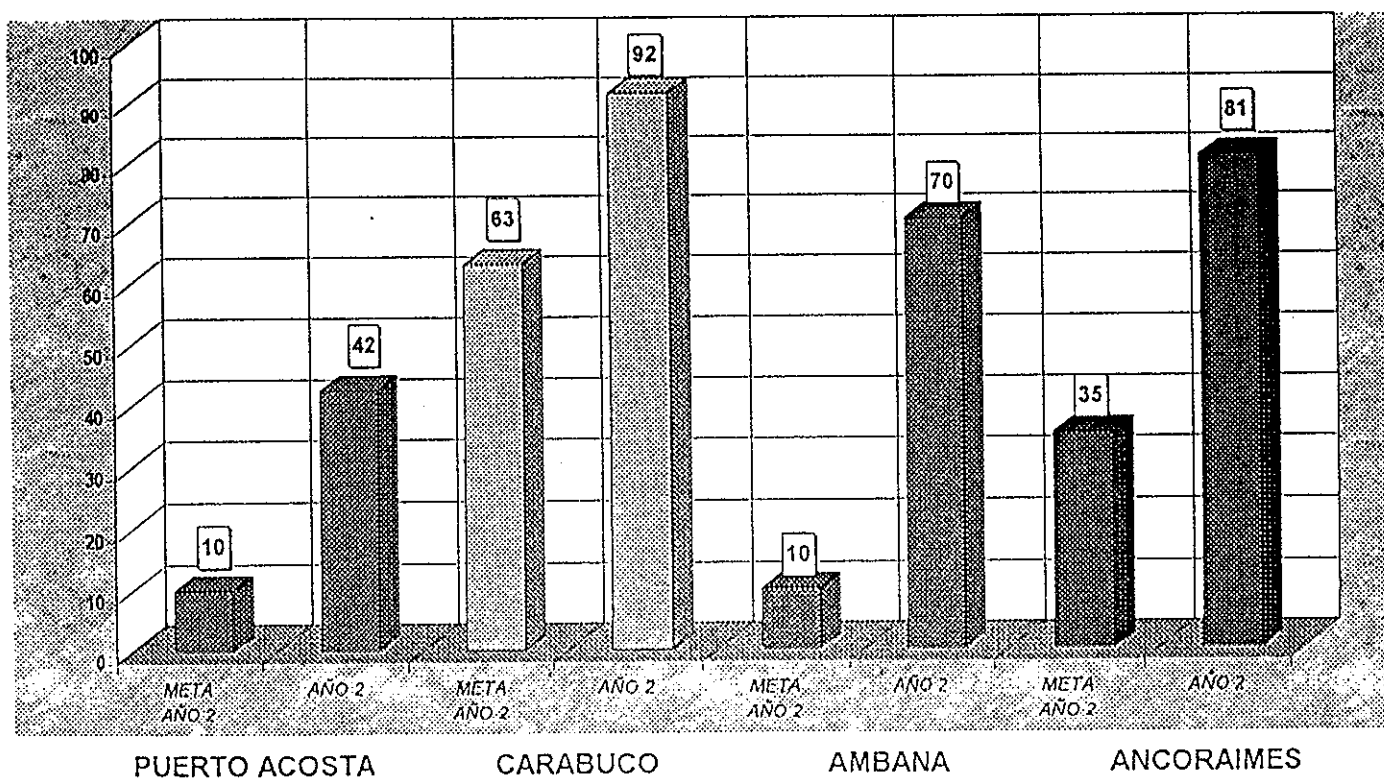
CONSEJO DE SALUD RURAL ANDINO

EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS
Cobertura de Esquema Completo en niño de 12 a 15 meses **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|----|-------|----|------------|------|----------|----|------------|----|-------|------|------------|----|-------|----|------------|------|------------|---|------------|----|-------|------|
| | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | | META AÑO 1 | | AÑO 1 | | META AÑO 2 | | AÑO 2 | |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | % | N° | % | N° | % |
| 8 | Cobertura de Esquema Completo en niño de 12 a 15 meses ** | 5 | 0 | » | 10 | 177 | 42,4 | 58 | 0 | » | 63 | 33 | 91,7 | 5 | 0 | » | 10 | 119 | 70,4 | 30 | 0 | » | 35 | 271 | 80,9 |

Cobertura de Esquema Completo
en niño de 12 a 15 meses



Fuente: Carnets de Salud Infantil - Gestión 1999



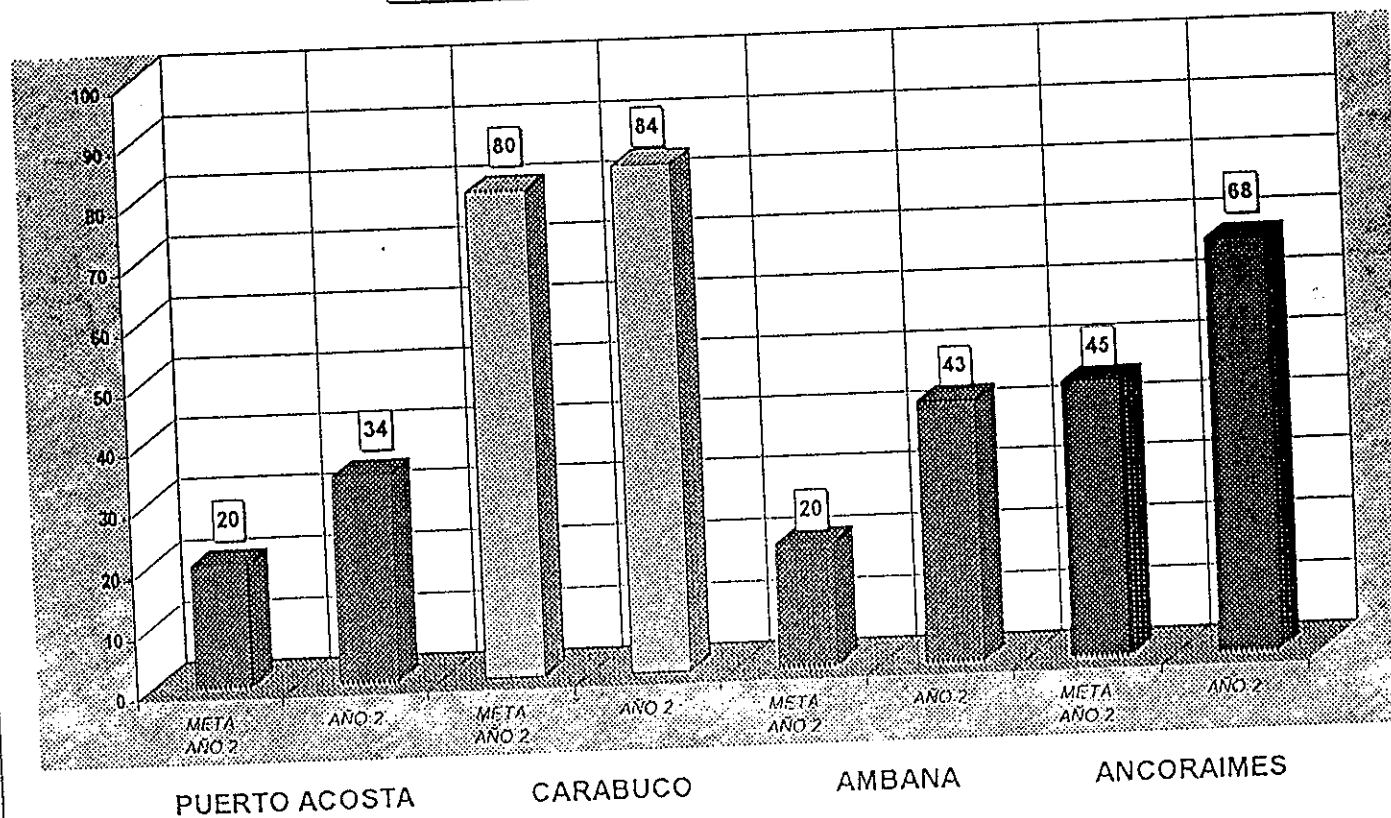
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS

Proporción de niños con CCD según norma en niños 0 a 23 meses **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|--|---------------|----|---|-------|-----|------|------------|----|---|-------|-----|------|------------|----|---|-------|-----|------|------------|----|---|-------|-----|------|
| | | META AÑO 1 | | | AÑO 1 | | | META AÑO 1 | | | AÑO 1 | | | META AÑO 1 | | | AÑO 1 | | | META AÑO 1 | | | AÑO 1 | | |
| | | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % | % | N° | % |
| 9 | Proporción de niños con CCD según norma en niños 0 a 23 meses ** | 10 | 0 | » | 20 | 276 | 33.7 | 75 | 0 | » | 80 | 162 | 83.5 | 10 | 0 | » | 20 | 129 | 42.6 | 35 | 0 | » | 45 | 433 | 67.9 |

Proporción de niños con CCD
según norma en niños 0 a 23 meses



Fuente: Carnets de Salud Infantil - Gestión 1999

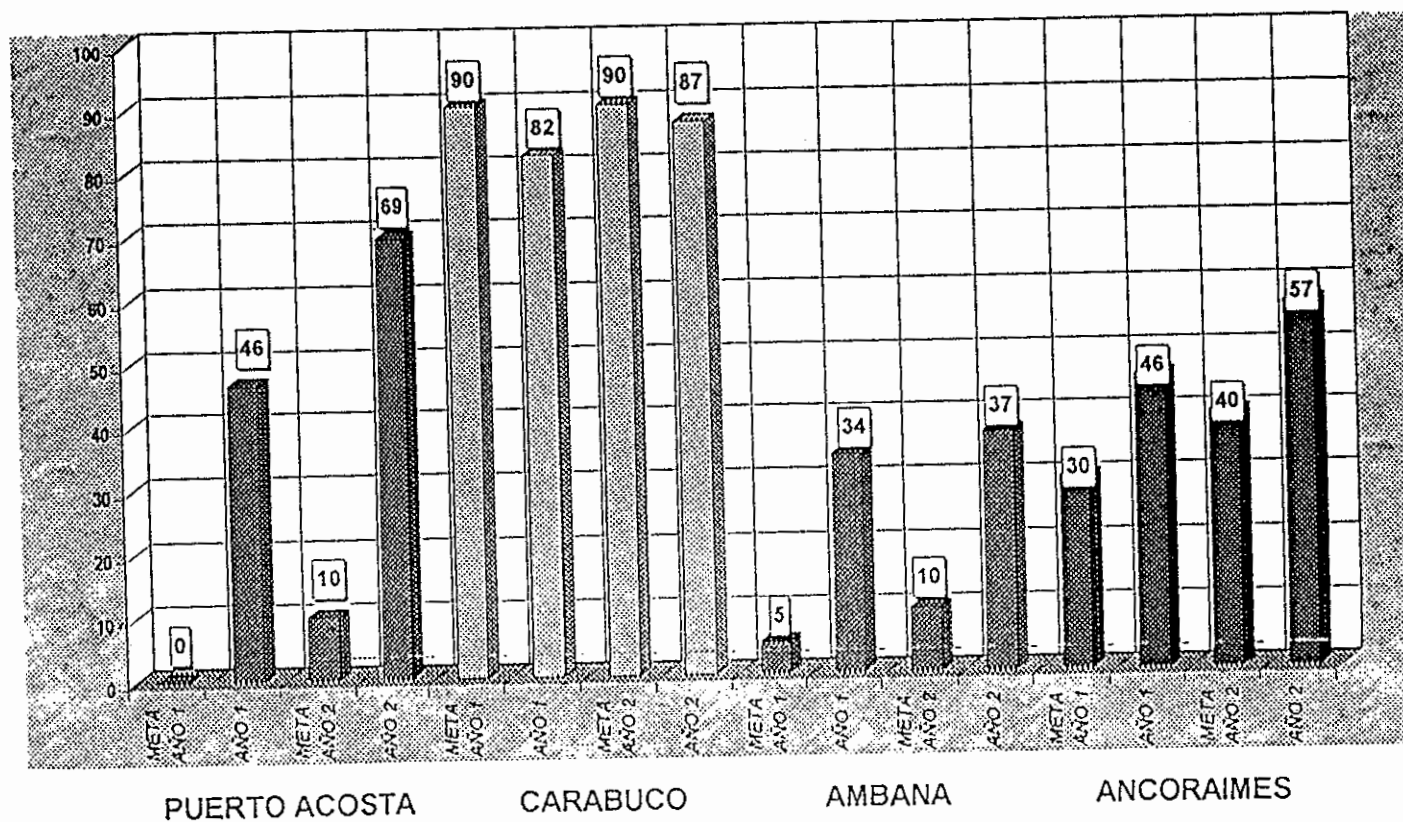


EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS
Proporción de niños con CCD en su 1er mes de vida **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|--|---------------|----|-------|----|-------|------|----------|----|-------|----|-------|------|--------|----|-------|----|-------|------|------------|-----|-------|----|-------|------|
| | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | |
| | | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % |
| 10 | Proporción de niños con CCD en su 1er mes de vida ** | 0 | 92 | 46.5 | 10 | 178 | 69.3 | 90 | 96 | 82.1 | 90 | 75 | 87.2 | 5 | 57 | 34.1 | 10 | 55 | 37.4 | 30 | 155 | 46 | 40 | 167 | 57.4 |

Proporción de niños con CCD
en su 1er mes de vida



Fuente: Gemets de Salud Infantil - Gestión 1999



CONSEJO DE SALUD RURAL ANDINO

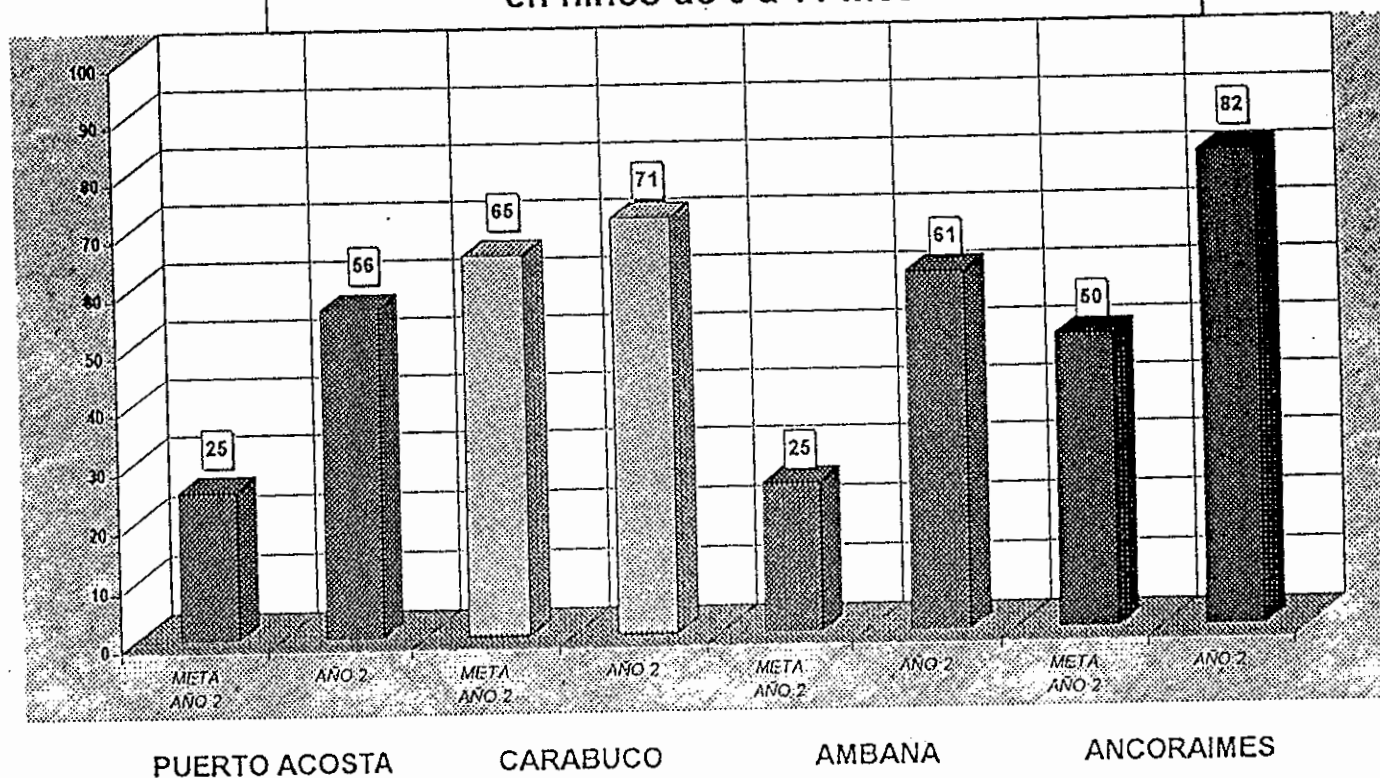
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS

Cobertura de Administración de 1 dosis de Vita "A" según norma niños de 6 a 11 meses **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|---|---------------|----|------------|----|-------|----|------------|----|------------|----|-------|------|------------|----|------------|----|-------|------|------------|----|------------|----|-------|------|
| | | META AÑO 1 | | META AÑO 2 | | AÑO 1 | | META AÑO 1 | | META AÑO 2 | | AÑO 1 | | META AÑO 1 | | META AÑO 2 | | AÑO 1 | | META AÑO 1 | | META AÑO 2 | | AÑO 1 | |
| | | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | % | N° | % |
| 11 | Cobertura de Administración de 1 dosis de Vita "A" según norma niños de 6 a 11 meses ** | 10 | 0 | » | 25 | 265 | 56 | 55 | 0 | » | 65 | 42 | 71.2 | 10 | 0 | » | 25 | 52 | 61.2 | 35 | 0 | » | 50 | 106 | 81.5 |

Cobertura de Administración de 1 dosis de Vita "A"
según norma
en niños de 6 a 11 meses



Fuente: Carnets de Salud Infantil - Gestión 1999



CONSEJO DE SALUD RURAL ANDINO

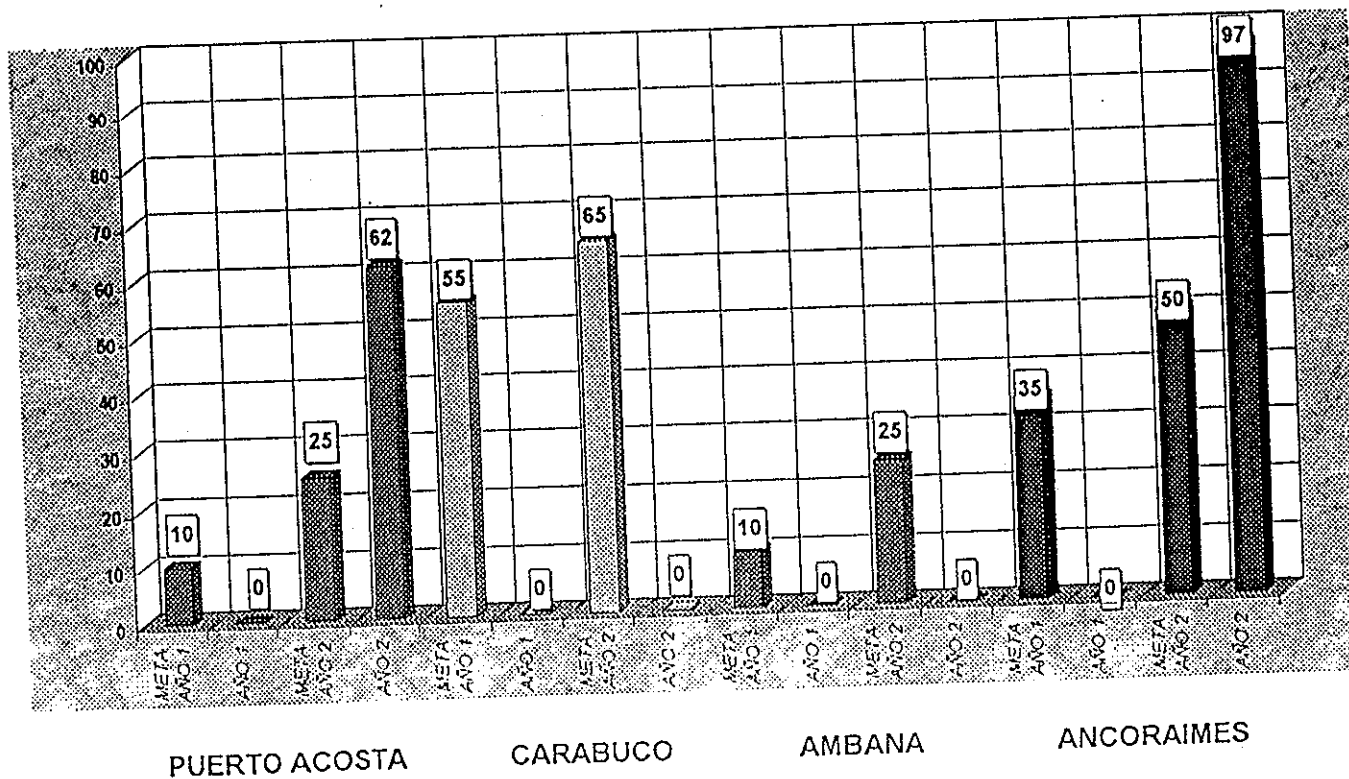
EVALUACION A MEDIO TERMINO PROYECTO CS XIII POR PROYECTOS Y GESTIONES

ATENCION INTEGRAL AL MENOR DE 5 AÑOS

Cobertura de Administración de 1 dosis de Vita "A" según norma niños de 12 a 23 meses **

| N° | INDICADOR | PUERTO ACOSTA | | | | | | CARABUCO | | | | | | AMBANA | | | | | | ANCORAIMES | | | | | |
|----|--|---------------|---|-------|----|-------|------|----------|---|-------|----|-------|---|--------|---|-------|----|-------|---|------------|---|-------|----|-------|------|
| | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | | META | | AÑO 1 | | AÑO 2 | |
| | | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % | N° | % |
| | | Y | % | Y | % | Y | % | Y | % | Y | % | Y | % | Y | % | Y | % | Y | % | Y | % | Y | % | Y | % |
| 12 | Cobertura de Administración de 1 dosis de Vita "A" según norma niños de 12 a 23 meses ** | 10 | 0 | " | 25 | 369 | 61.6 | 55 | 0 | " | 65 | 0 | " | 10 | 0 | " | 25 | 0 | " | 35 | 0 | " | 50 | 333 | 96.8 |

Cobertura de niños de 12 a 23 meses con 2^a dosis de Vita "A" según norma

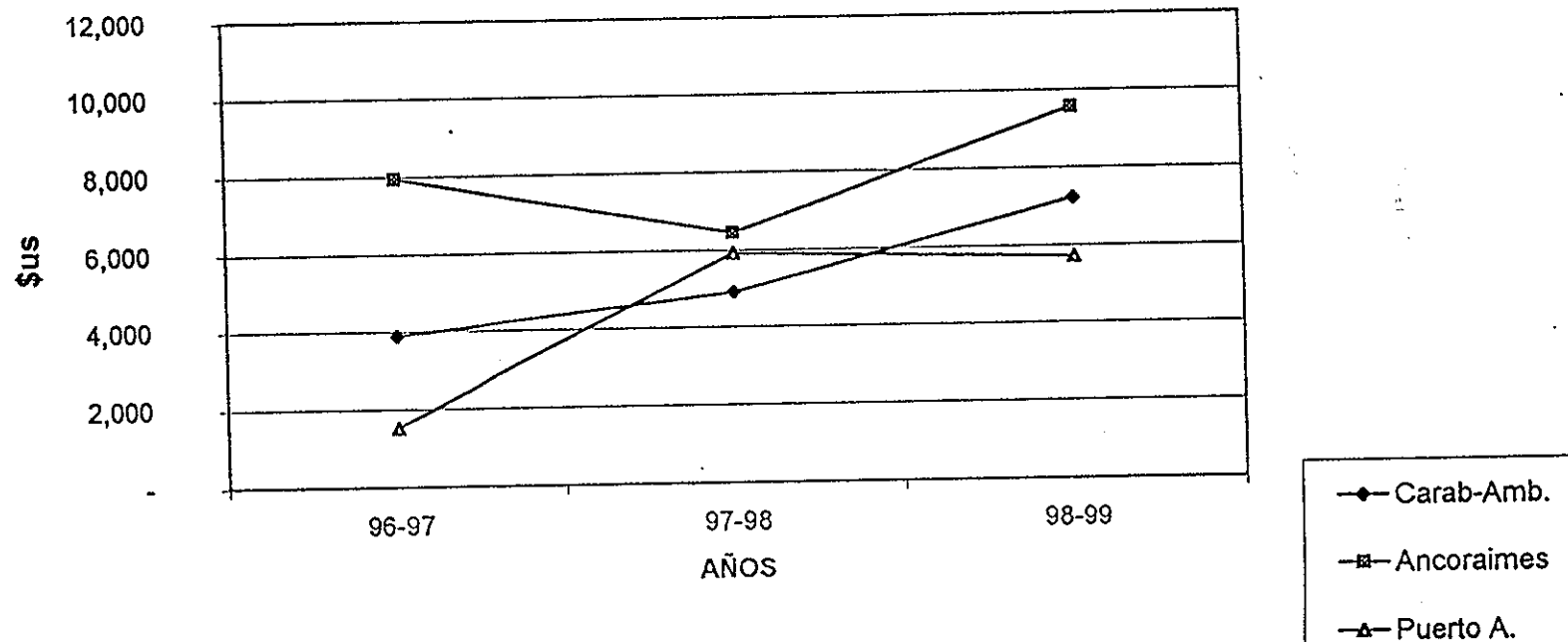


Attachment 6
Sources of Income by Year

ATTACHMENT 6

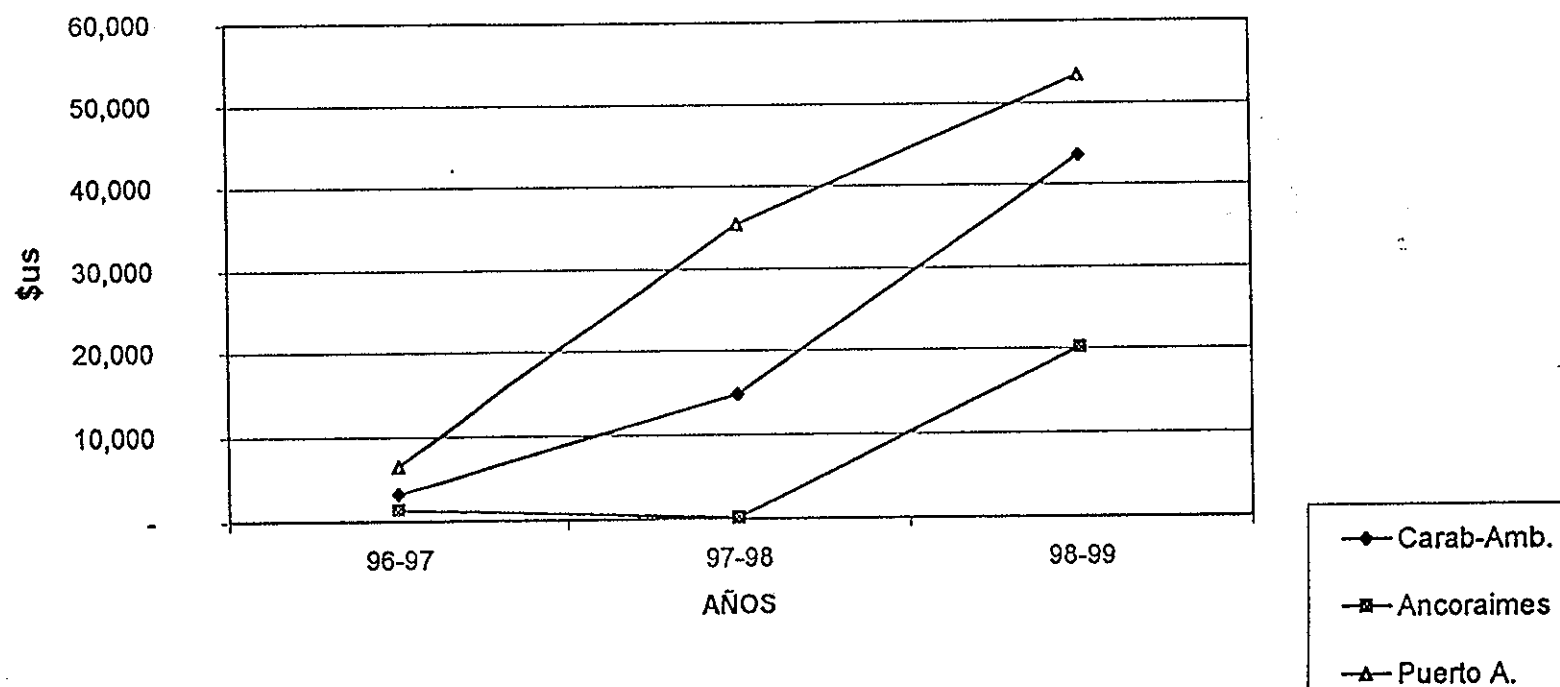
| | 96-97 | 97-98 | 98-99 |
|------------|--------|--------|--------|
| Carab-Amb. | 3,862 | 4,877 | 7,216 |
| Ancoraimes | 7,939 | 6,441 | 9,550 |
| Puerto A. | 1,527 | 5,895 | 5,702 |
| | 13,328 | 17,213 | 22,468 |

CONSEJO DE SALUD RURAL ANDINO - INGRESO POR LA VENTA DE SERVICIOS



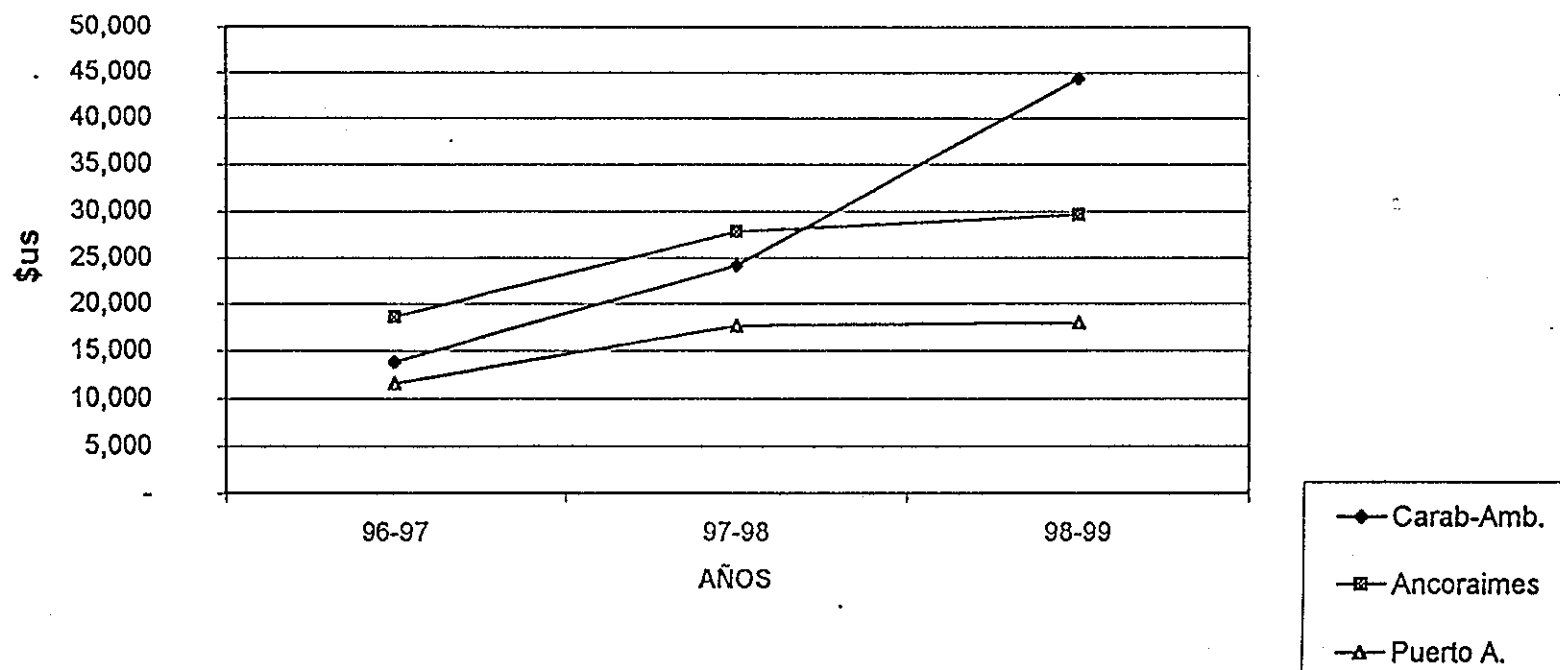
| | 96-97 | 97-98 | 98-99 |
|------------|--------|--------|---------|
| Carab-Amb. | 3,230 | 14,701 | 43,519 |
| Ancoraimes | 1,333 | 150 | 20,081 |
| Puerto A. | 6,476 | 35,269 | 53,414 |
| | 11,039 | 50,120 | 117,014 |

CONSEJO DE SALUD RURAL ANDINO - INGRESO LOCALES HAM



| | 96-97 | 97-98 | 98-99 |
|------------|--------|--------|--------|
| Carab-Amb. | 13,706 | 24,080 | 44,283 |
| Ancoraimes | 18,529 | 27,788 | 29,598 |
| Puerto A. | 11,541 | 17,572 | 17,927 |
| | 43,776 | 69,440 | 91,808 |

CONSEJO DE SALUD RURAL ANDINO - INGRESO LOCALES SEDES



Attachment 7
Staff Roles and Responsibilities

ATTACHMENT 7

CONSEJO DE SALUD RURAL ANDINO
GERENCIA DE RECURSOS HUMANOS

LISTA DE PERSONAL AL 8 DE DICIEMBRE DE 1999
OFICINA LA PAZ

| Nro. | Nombre | Cargo |
|------|--------------------|-----------------------------|
| 1 | Nathan Robison | Director Nacional |
| 2 | Gloria Laime | Gerente Administrativo |
| 3 | Gladys Soruco | Asistente Administrativo |
| 4 | Hernán Castro | Sub- gerente Técnico |
| 5 | Nelly Marca | Asistente Gerencia Técnica |
| 6 | Lucia Heredia | Administradora Of. La Paz |
| 7 | Fernando Sotomayor | Responsable Computos |
| 8 | Marcela Mendoza | Secretaria Gerencia Técnica |
| 9 | Delia Morales | Secretaria RR.HH. |
| 10 | Nelly Mendieta | Secretaria Dir. Nacional |
| 11 | Jose Luis Antezana | Asistente Logística |
| 12 | Wilson Zambrana | Asistente de Oficina |
| 13 | Felipe mendoza | Portero |
| 14 | Prudencio Ramos | Responsable Logística |
| 15 | | |
| 16 | | |
| | CONTRAPARTE | |
| 1 | Ricardo Hidalgo R. | Gerente RR.HH. |
| 2 | Alberto Gollia | Asesor Legal |

CONSEJO DE SALUD RURAL ANDINO
GERENCIA DE RECURSOS HUMANOS

LISTA DE PERSONAL AL 8 DE DICIEMBRE DE 1999
ANCORAIMES

| Nro. | Nombre | Cargo |
|-------------|----------------------|----------------------------------|
| 1 | Franz Trujillo | Director Ejecutivo de Proyecto |
| 2 | Osbaldo Miranda | Administrador de Area |
| 3 | Elsa Quispe | Conrador de área |
| 4 | Pablo Siñani | Auxiliar responsable de sector |
| 5 | Juaquin Pacosillo | Supervisor de área |
| 6 | Marlín Chiri | Supervisor de área |
| 7 | Sabina Poma | Auxiliar responsable de sector |
| 8 | Luis Cacasaca | Auxiliar responsable de sector |
| 9 | Jacinto Castro | Radiólogo |
| 10 | Basilia Hualpa | Laboratorista |
| 11 | Hilarion Sunavi | Auxiliar responsable de sector |
| 12 | Rosmary Machaca | Responsable de IEC. |
| 13 | Irma Carrazana | Ex - Directora Ejec. De Proyecto |
| 14 | Noel Mostajo | Ex - adminstrador de área |
| 15 | Fermín Quispe | Ex - Auxiliar de enfermería |
| 16 | Bernabe Paredes | Ex - Administrador de área |
| 17 | José Hernani | Ex - Auxiliar de enfermería |
| 18 | Pedro Yugra | Ex - Auxiliar de enfermería |
| CONTRAPARTE | | |
| 1 | Rocio Montes | Médico Jefe de área |
| 2 | Rosio Gemio | Lic. de enfermería |
| 3 | José Martínez | Odontólogo |
| 4 | Blanca Alba | Odontóloga |
| 5 | Ma. Eugenia Huanca | Coordinadora en SSR. |
| 6 | Paulino Loza | Auxiliar de enfermería |
| 7 | Lourdes Poma | Auxiliar de enfermería |
| 8 | Alejandro Casablanca | Conductor |

CONSEJO DE SALUD RURAL ANDINO
GERENCIA DE RECURSOS HUMANOS

LISTA DE PERSONAL AL 8 DE DICIEMBRE DE 1999
CARABUCO

| Nro. | Nombre | Cargo |
|------|------------------------|--------------------------------|
| 1 | Mirtha Aguilar | Director Ejecutivo de Proyecto |
| 2 | Gonzalo Medina | Administrador de área |
| 3 | Carla Mendoza | Contadora de área |
| 4 | José Cutipa | Auxiliar de enfermería |
| 5 | Cruz Apaza | Auxiliar de enfermería |
| 6 | Ismael Yuque | Resp. Farmacia/ laboratorio |
| 7 | Ubaldo Quelali | Supervisor |
| 8 | Francisco Quispe | Auxiliar de enfermería |
| 9 | Paulina Huarca | Auxiliar de enfermería |
| 10 | Roxana Sardón | Lic. Nutricionista |
| 11 | Eduardo Kapa | Auxiliar de enfermería |
| 12 | Gregoria Huanaco | Auxiliar de enfermería |
| 13 | Demetrio Ticona | Auxiliar de enfermería |
| 14 | Walter Paucara | Auxiliar de enfermería |
| | AMBANÁ | |
| 1 | Simeon Barra | Supervisor |
| | CONTRAPARTE | |
| 1 | José Luis Miranda | Jefe Medico de Area |
| 2 | María Perez | Lic.Enfermería |
| 3 | Luis Fernando Palacios | Odontólogo |
| 4 | Virginia Lozano | Coordinadora SSR. |
| | AMBANÁ | |
| 1 | Ernesto Limachi | Medico de Area |
| 2 | Ramón Surco | Auxiliar de enfermería |
| 3 | Damiana Escobar | Auxiliar de enfermería |
| 4 | Ernesto Cahuana | Auxiliar de enfermería |

| Título | Número | Rol y Carga de trabajo |
|------------------------|--------|---|
| Director Nacional | 1 | 1.1.1. Responsabilidad para el desarrollo e institucionalización de la Visión, Misión y objetivos institucionales. |
| Directores de Proyecto | 3 | 1.1.2. Responsabilidad para el desarrollo y fortalecimiento de la Asamblea y Directorio. |
| Gerentes de Area | 2 | 1.1.3. Responsabilidad para el desarrollo y fortalecimiento de la estructura organizacional. |
| | | 1.1.4. Responsabilidad para la obtención de recursos económicos. |
| | | 1.1.5. Responsabilidad para la toma de decisiones que afectan costos. |
| | | 1.1.6. Responsabilidad para el desarrollo y fortalecimiento de relaciones interinstitucionales. |
| | | 1.1.7. Responsabilidad para la supervisión y fortalecimiento del desempeño personal. |
| | | 1.1.8. Responsabilidad para el desarrollo e implementación de políticas técnicas y administrativas. |
| | | 1.1.9. Responsabilidad para el desarrollo e implementación de planes de trabajo de corto, mediano, largo plazo. |
| | | 1.1.10. Responsabilidad por la producción de informes o documentos escritos de calidad. |
| | | Dentro de la evaluación de un cargo bajo estos criterios, se debe tomar en cuenta la complejidad y frecuencia de las decisiones y si existen pocas herramientas de decisión a aquellos cargos que requieren poco criterio propio y el empleado recibe instrucciones detalladas que le corresponde ejecutar. |

| Título | Número | Rol y Carga de trabajo |
|----------------------|--------|---|
| Administrador | 1 | 2.1.1. Responsabilidad en la difusión y practica de la Visión, Misión y Objetivos institucionales. |
| Responsable de Area. | 4 | 2.1.2. Responsabilidad por decisiones que afectan los costos. Considera el grado en que las decisiones pueden afectar los costos, los precios, la calidad de los servicios, el mantenimiento de las buenas relaciones con los usuarios. |
| | | 2.1.3. Responsabilidad por estudios o investigación. Evalúa la complejidad, la importancia y los requerimientos de redacción de los trabajos de investigación asignados al cargo. |
| | | 2.1.4. Responsabilidad por trabajo creativo. Este criterio incluye la concepción, diseño y perfeccionamiento de procesos, métodos, materiales, programas, etc. |
| | | 2.1.5. Responsabilidad por contactos con otros. Este factor toma en cuenta el grado de relacionamiento requerido con el público usuario, tacto y buen criterio en negociaciones o influencias y el buen trato requerido para con los subalternos. |
| | | 2.1.6. Responsabilidad por el tipo y forma de supervisión. |
| | | 2.1.7. Responsabilidad por el número de empleados supervisados. |
| | | 2.1.8. Responsabilidad por la elaboración y presentación de informes, propuestas y documentos de calidad. |
| | | 2.1.9. Conocimientos requeridos para el cargo. |
| | | 2.1.10. Complejidad de las tareas a realizarse. |
| | | 2.1.11. Responsabilidad por el manejo de datos confidenciales. |
| | | 2.1.12. Capacidad de trabajo en Equipo. |
| | | 2.1.13. Responsabilidad en el manejo de conflictos en el área. |
| | | 2.1.14. Capacidad de liderazgo de servicio. |
| | | 2.1.15. Riesgos inevitables. Este factor mide los riesgos físicos inherentes al cargo. |
| | | 2.1.16. Responsabilidad por el manejo de fondos ó dinero. |
| | | 2.1.17. Responsabilidad por la exactitud de los trabajos. |
| | | |

CONSEJO DE SALUD RURAL ANDINO
GERENCIA DE RECURSOS HUMANOS

| Título | Número | Rol y Carga de trabajo |
|-------------------------|--------|--|
| Administrador de Area. | 2 | 3.1.1. Responsabilidad por la difusión y practica de la Visión, Misión y objetivos institucionales. |
| Técnico en Salud | 1 | 3.1.2. Responsabilidad por planificación. Este factor evalúa la responsabilidad por el cargo para la planificación a corto o mediano plazo. Considera el tipo, variedad, complejidad de la planificación requerida y el periodo cubierto por los planes. |
| Técnico en Comunicación | 1 | 3.1.3. Responsabilidad por decisiones que afectan los costos. Considera el grado en que las decisiones pueden afectar los costos, los precios, la calidad de los servicios, el mantenimiento de las buenas roalciones con los usuarios. |
| Técnico en Computación | 1 | 3.1.4. Responsabilidad por contactos con otros. Este factor toma en cuenta el grado de relacionamiento requerido con el publico usuario, tacto y buen criterio en negociaciones e influencias y el buen trato requerido para con los subalternos. |
| Contadores | 3 | 3.1.5. Responsabilidad por el tipo y la forma de supervisión. |
| | | 3.1.6. Responsabilidad por el número de empleados supervisados. |
| | | 3.1.7. Conocimientos requeridos para el cargo. |
| | | 3.1.8. Complejidad de las tareas a realizarse. |
| | | 3.1.9. Responsabilidad por el manejo de datos confidenciales y/o fidodignos. |
| | | 3.1.10. Riesgos inevitables. Este factor mide riesgos fisicos inherentes al cargo. |
| | | 3.1.11. Responsabilidad por el manejo de dinero de la institución. |
| | | 3.1.12. Responsabilidad por el buen uso y conservación de bienes de la institución. |
| | | 3.1.13. Responsabilidad por la exactitud del trabajo. |

| Título | Número | Rol y Carga de trabajo |
|--------------------------------------|--------|---|
| Auxiliar Responsable de sector | 17 | 4.1.1. Conocimientos requeridos para el cargo. |
| | | 4.1.2. Complejidad de las tareas a realizarse. |
| Promotor Institucional | 35 | 4.1.3. Responsabilidad por contactos con otros. (Aut. Comunales, Educativas, otras ONG's, Iglesia). |
| | | 4.1.4. Responsabilidad por el manejo de dinero de la institución. |
| | | 4.1.5. Riesgos inevitables. Este factor mide los riesgos físicos inherentes al cargo |
| | | 4.1.5. Riesgos inevitables. Este factor mide los riesgos físicos inherentes al cargo. |
| | | 4.1.6. Responsabilidad por el manejo de datos confidenciales y/o fidedignos y exactos. |
| | | 4.1.7. Responsabilidad por el buen uso y conservación de bienes de la institución. |

CONSEJO DE SALUD RURAL ANDINO
GERENCIA DE RECURSOS HUMANOS

| Título | Número | Rol y Carga de trabajo |
|-----------|--------|---|
| Conductor | 2 | 5.1.1. Conocimientos requeridos para el cargo. |
| Portero. | 2 | 5.1.2. Complejidad de las tareas a realizarse. |
| | | 5.1.3. Riesgos inevitables. Este factor mide los riesgos físicos inherentes al cargo. |
| | | 5.1.4. Responsabilidad por el buen uso y conservación de bienes de la institución.. |
| | | 5.1.5. Responsabilidad por contactos con otros. |
| | | 5.1.6. Responsabilidad por el manejo de datos confidenciales, fidedignos y/o exactos. |